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The Educational Record

October 1957

RAYMOND F. HOWES, *Editor*

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The Educational Record

October 1957

The Josephs Report—Toward a Federal Policy in Higher Education

RICHARD G. AXT

TEN YEARS ago this December a Presidential commission presented its report in six slim volumes entitled *Higher Education for American Democracy.*[1] In August of this year, the President's Committee on Education Beyond the High School issued a *Second Report to the President,* and by December the Committee will have concluded its work.

The report of the 1947 Commission, chaired by the late George F. Zook, together with expanded federal activities in higher education, initiated a continuing debate over the proper role of the Federal Government in higher education. The 1957 report of the President's Committee, chaired by Devereux C. Josephs, crystallized many aspects of this ten-year debate, and over the next few years it will undoubtedly be the focus of further discussion of federal policy in higher education.

This may be an appropriate time to compare briefly these two reports and to consider how far we have advanced toward a federal policy in higher education. Then a preliminary appraisal of the policy which may come from the Josephs Committee recommendations will be offered.

The Zook Commission and the Josephs Committee

A careful comparison of the detailed recommendations and the assumptions and reasoning of these two groups of Presidential advisers would be most instructive, although not possible here. It is, however, possible to contrast the broad conclusions of each report and to consider how the conclusions of the 1957 report relate to changes in higher education which took place in the intervening decade.

To begin with size, the 1957 report[2] is less than one-third the size of its predecessor and much less detailed. Specific recommendations, often on detailed aspects of the administration and organization of higher education, appear on page after page of the six volumes of the Zook report. In contrast, the specific recom-

[1] President's Commission on Higher Education, *Higher Education for American Democracy,* 6 vols. (Washington: Government Printing Office, 1947, 1948).

[2] President's Committee on Education Beyond the High School, *Second Report to the President* (Washington: Government Printing Office, 1957).

mendations of the Josephs Committee take up less than ten printed pages.

Partly because of these differences, and partly due to style and intent, the report of the Josephs Committee appears to be addressed more to the interested layman and the busy administrator than to the professional educator.

The Zook report

But there is a more fundamental sense in which the Zook report, in retrospect, strikes one as much more a report of and for educators than that of the Josephs Committee. It is in its expression of the belief, more often held by educators than by others, that education is an instrument or vehicle for change—for deliberately changing society or the world.

In the 1947 report the entire first volume of one hundred pages is devoted to "establishing the goals" for American higher education. "Effective democratic education will deal directly with current problems." It is "the making of the future. . . . Perhaps its most important role is to serve as an instrument of social transition, and its responsibilities are defined in terms of the kind of civilization society hopes to build."

In the light of the world situation as it appeared in 1947, the Commission selected these as the principal goals for higher education:

1. Education for a fuller realization of democracy in every phase of living.

2. Education directly and implicitly for international understanding and cooperation.

3. Education for the application of creative imagination and trained intelligence to the solution of social problems and to the administration of public affairs.

The Zook Commission then elaborated on each of the three goals listed, argued persuasively and at some length for equal opportunity, devoted a chapter to the need for, and objectives of, general education, and defined the particular goals of each level of higher education from the community college through the graduate school.

To meet these goals, the Zook Commission recommended that our colleges and universities enroll 4.6 million students by 1960—a recommendation that was the occasion of truly acrimonious debate in the educational community.[8] It further recommended a great expansion in public community or junior colleges and the "equalization" of educational opportunity through such community colleges, the reduction or abolition of tuition fees at public institutions, and greatly increased scholarship and graduate fellowship assistance to students.

As far as federal policy was concerned, these goals could only be fully realized by programs of (1) federal scholarships and fellowships on a large scale, (2) federal grants to the states to help meet the current operating expenses of public colleges (estimated at more than $200 million a year), (3) federal grants to the States for capital outlay in higher education (estimated at $2–$3 billion from 1949 to 1960). In short, the Federal Government was to play a major role, by virtue of financial aid, in achieving the goals set by the Commission and in the support of higher education.

The Josephs report

The 1957 report takes the world and American society as it is and tries to see where higher education fits in this world. True, the Committee fully recognizes that we live in a growing, changing, and exceedingly complex world—hence the need for more, and better, and differently educated American citizens. But the Committee sees its task

[8] Gail Kennedy (ed.), *Education for Democracy: The Debate over the Report of the President's Commission on Higher Education* (Boston: D. C. Heath & Co., 1952).

as finding ways for higher education to meet its challenges and opportunities and, most of all, its problems, in a period of rapid growth.

There are, in 1957, two basic and challenging facts. First, the high birth rates of the past fifteen years and the growing proportion of the population who are entering college will shortly result in unprecedented enrollments—five, six, or seven million college students. Secondly, there are ever increasing demands in our expanding and increasingly technological economy for personnel with professional, semiprofessional, or technical education—education beyond the high school.

These facts will cause great problems in higher education; more facilities, more faculty members, and more funds will be needed.

The Josephs Committee points out the need for expansion and change in higher education in order to meet these changes in society. The Committee considers *how* higher education can meet these demands.

With some risk of oversimplifying we could contrast the committees in terms of the "welfare" view of higher education and the "manpower" view of higher education, implying that one Presidential committee would change the world through higher education while the other would help higher education change to fit the world.

Another major difference between the recommendations of the Josephs Committee and those of the 1947 Commission concerns the role of the Federal Government. The Josephs Committee does not recommend federal action or assistance in several areas of higher education in which the earlier group did, and it does not call for federal spending in any specific amounts even when federal action is approved. Clearly the role of the Federal Government is thought to be "residual" by the 1957 group, especially in the area of finance, in contrast to the major role the Federal Government was expected to play in achieving the objectives of the Zook Commission.

What are some reasons for these differences between the two reports?

Influence of the 1947-57 decade

It is tempting to consider the makeup of the two committees—to contrast the backgrounds and interests of the members and how these might be reflected in the two reports. In a similar vein, we might contrast the political programs of the Truman and Eisenhower administrations, particularly the views of each President on the proper role of the Federal Government in the field of education. Such factors probably would help to explain some of the views of each committee. In my opinion, however, changes in higher education itself, in the decade between 1947 and 1957, throw much more light on the differences in the conclusions of the two committees.

The most obvious instance is the view each committee took of the question "How many should attend college?" At the time of the 1947 Commission report, there were about 2.4 million students enrolled in American colleges and universities, of whom about 1 million were veterans. The Commission estimated that only 15 percent of the civilian college-age group (eighteen- to twenty-one-year-olds) were enrolled in college.

Projecting prewar trends to 1960, the Zook Commission estimated that only 2.9 million persons would be enrolled in colleges and universities by 1960. This, they maintained, was not enough. Assuming that at least 49 percent of our population have the mental ability to complete 14 years of study and that 32 percent could complete an advanced liberal or professional education, the Zook Commission set a college enrollment goal of 4.6 million by 1960.

As noted above, it was thought that

only substantial federal action on a number of fronts would make such large enrollments an accomplished fact.

Underlying most of the discussion about higher education from 1947 through the early 1950's was the assumption that as the veterans completed their education, college enrollments would decline. It was known that the size of the college-age group would not increase substantially before 1960—and that for a few years this group would grow smaller—and the obvious inference was drawn.

The Josephs Committee in 1957 was faced with an entirely different set of facts. College enrollments did not decline substantially as the veterans left college. Enrollments increased during the 1950's at a much faster rate than had been expected. By the fall of 1956, college enrollments were almost 3 million—well above the Zook Commission prediction of 2.9 million by 1960.

It now appears that even without substantial federal-aid programs, college enrollments in 1960 will reach 4 million and may approach the Zook Commission goal of 4.6 million which was the subject of so much controversy at the time.

The Zook Commission did not underestimate the size of the college-age group during the 1950's—this was accurately known. They did seriously underestimate the propensity of this group to attend college and the ever-increasing demand for college graduates. The increase in college enrollments in the past few years has been due to a steady and quite rapid increase in the *proportion* of the college-age group which in fact attends colleges.

Another fact unknown to the Zook Commission was the continuation of high postwar birth rates. In 1947 many population experts thought these high birth rates would be a passing phenomenon. We now know they were not.

The Josephs Committee could reason with certainty that the great increases in the size of the college-age group—and with this, increasing enrollments—will come after 1960. It could confidently predict that college enrollments will total *at least* 6 million by 1970.

Given these facts it is not hard to understand why the Josephs Committee was mainly interested in how higher education could meet the new demands upon it, rather than in providing goals for higher education. More importantly, if great numbers will be upon us with no federal effort, getting increased numbers into college could hardly be a main rationale for a positive or expanded federal policy toward higher education, as it was for the Zook Commission in 1947.

We may ask then, whether the Josephs Committee did find a rationale, other than large numbers, for its proposals in the area of federal policy.

Recommendations of the Josephs Committee

Mr. Josephs' Committee sees four major problem areas in the coming expansion of higher education. First is the need for adequately trained teachers. The Committee sees the mounting shortage of excellent teachers as the "most critical bottleneck" to the expansion and improvement of higher education. It recommends, among other things, *doubling* the average salary level within five to ten years.

Secondly, the Committee endorses the American goal of expanding educational opportunity by enabling "each young person to develop to his or her full potential, irrespective of race, creed, national origin or sex." In this connection, the Committee notes that each year some 200,000 of our ablest young people fail to carry their education beyond the high school due to lack of motivation, proper guidance, or financial resources, or to discriminatory barriers.

Thirdly, the Committee notes the need for new and expanded physical facilities. Here it points to the need for careful planning to avoid duplication or underused facilities and to possible increased use of well-planned two-year "community colleges."

Finally, the Committee states that in the next ten years colleges and universities will require an "enormous expansion" of funds from all customary sources. It then considers the role of the Federal Government in meeting these problems.

Need for a federal policy.—The Josephs Committee, agreeing with all recent studies of the subject, notes that existing relationships between the Federal Government and higher education are exceedingly complex, that over the years a large number of federal programs affecting higher education have developed, that these programs have been developed to meet specific situations, and that there is little, if any, control or coordination of these programs within the Federal Government itself.

Attention is called to federal relationships with land-grant institutions, financial assistance to graduate students in the sciences, the enormous programs of financial assistance to veterans of World War II and Korea, federal research contracts with and grants to universities, the several reserve officer training programs, and other federal programs in higher education.

The term "federal aid" is not, the Committee notes, appropriate to describe most of these relationships, since most of the federal funds expended are for services rendered rather than for assistance as such, and frequently provide only partial payment for such services.

It quotes with approval the 1931 statement of the National Advisory Committee on Education:

> The Federal Government has no inclusive and consistent public policy as to what it should or should not do in the field of education. Whatever particular policies it seems to be pursuing are often inconsistent with each other, sometimes in conflict. They suggest a haphazard development, wherein policies of far-reaching effect have been set up as mere incidents of some special attempt to induce an immediate and particular efficiency.
>
> Without a comprehensive, forward-looking, and coherent public policy in regard to education, the present educational situation in the Federal Government cannot be greatly improved.

The Committee notes that the statement is as true today as it was twenty-six years ago.

At several points in its report, the Josephs Committee observes that we need much better coordination and planning of existing federal programs, and that federal agencies providing statistical and other information on higher education should be greatly strengthened.

It recommends that "permanent machinery"—presumably a commission or committee—be established "with provision for broadly representative lay and professional advisers, to keep under continuous scrutiny all Federal programs affecting education beyond the high school and to advise the President and the heads of appropriate Federal agencies with respect thereto."

It can be said that if the report of the Committee were adopted by the President and the Congress, we would have an over-all federal policy toward higher education.

Role of the Federal Government

Some idea of the conflicting advice pressed upon the Committee can be gained from the following statement:

> The Committee has been strongly urged by some to speak out against Federal activity in education beyond the high school. Advocates of this position base their views on the undisputed and historic responsibility of the States to provide education. They argue that massive Federal action in

the field of education beyond the high school would ultimately lead to Federal domination and thereby compromise the responsibility of each State to provide and control educational opportunities for its own citizens . . .

On the other hand, advocates of strong Federal action point to the national consequences of failure to educate all our people up to their capabilities. Considering the problem from the national viewpoint, they conclude that Federal capability alone is equal to so great a task. They point out that the capabilities of the States vary widely. They argue the Constitution has wisely provided legal means for the Federal Government to act when a critical education shortage appears—and they regard the current problems in education beyond the high school as highly critical.

The Committee supports the middle view which assumes the capacities of the States and private groups and individuals to do the job with some Federal assistance and does not project a Federal policy beyond the limits of our present knowledge of current conditions and future needs. The role which the Committee visualizes for the Federal Government is based on these essential considerations:

1. The Federal Government can and does provide some financial assistance, and may ultimately be required to provide much more, but, by its very nature, once it entered the picture largely the evolutionary process would end and the weight of the responsibility would tend to shift to the Federal Government. The Committee does not believe that the time has yet arrived when the Federal Government should have a role of permanent, direct economic support of education beyond the high school. It cannot predict when if ever in its opinion that time will arrive.

2. Either Federal standardization or local apathy would be fatal to the best interests of education. But recent actions of a number of States, regions and communities give strong evidence of a local willingness to define and plan solutions. Some forms of Federal assistance may inhibit, while others may stimulate, such direct concern. The Committee believes that strong local incentive, plus imaginative and varied approaches to the solutions of present problems are needed and can produce the most significant and dramatic developments in education beyond the high school in the next quarter century.

CONCLUSIONS AND RECOMMENDATIONS

1. The Federal Government should provide broad national leadership, should collect and provide useful data and services, and should provide certain other needed assistance, such as is recommended in this Report. But it should do these things only by methods which strengthen State and local effort and responsibility and, in the case of direct financial assistance, only through programs which are periodically reviewed and which are promptly terminated when no longer clearly justifiable. Finally, the Federal Government should studiously avoid programs which carry the threat either of control or of other adverse effects upon the educational institutions.[4]

The Josephs Committee's specific recommendations for federal action in the field of higher education are simply and briefly stated. Rather than to try to summarize or paraphrase them, we will quote those major recommendations of the Committee which will be their contribution to future debate over the proper role of the Federal Government in meeting the problems of higher education.

On that "most critical bottleneck"—the mounting teacher shortage—the Committee has *no* recommendation for federal action.

Apart from recommendations on better coordination and planning of existing federal programs, and the need for more effective federal provision of statistical and other information on higher education from federal agencies, the Committee's specific recommendations deal with two areas: assistance to students and financing higher education, the latter including the problem of financing physical facilities.

[4] President's Committee on Education Beyond the High School, *op. cit.*, pp. 105–6.

Assistance to students.—After stressing the need for greatly increased emphasis on sound guidance and counseling programs in the schools and increased support for the use of loans for college students, the Committee makes the following recommendations on pages 19 and 20 of its report:

5. That there be developed an experimental, Federally sponsored "work-study" program at institutions of higher learning. This program should provide 25,000 to 50,000 notably able and needy students with appropriate employment at fair wages in the service of the institution attended.

6. That the Federal revenue laws be revised, with appropriate safeguards, in ways which will permit deductions or credits on income tax returns by students, their parents or others who contribute to meeting their expenditures necessarily incurred in obtaining formal education beyond the high school; and, further, that provisions be included which will grant proportionately greater tax benefit to those least able to afford those expenditures.

7. That private, local, and State sources increase their support of scholarship funds to several times the present amount and number of scholarships. The Committee believes that, insofar as assistance by the Federal Government is concerned, it should not at the present time, in the light of the considerations presented in this chapter, undertake to provide new scholarships (other than "work-study") for undergraduate students. To the extent that other sources should prove, after fair trial, to be inadequate to meet the requirements for effective scholarships, as defined in this chapter, the Committee would favor a Federal scholarship program as the only way to fill the gap, with free choice of course of study and reasonable choice of institution by the student, and with a cost-of-education grant to the institution (wherever feasible) based upon average institutional costs in the Nation.

8. That the formulation of any scholarship policy should include provision for funds for the institution (wherever feasible) to pay for the cost of educating the student above that which he pays through fees and tuition, since to attempt to educate more students without the means to provide additional salaries and facilities would inevitably lead to a deterioration of the quality of education.

Financing higher education.—The Josephs Committee had a number of specific recommendations on financing higher education, directed to the States, the institutions, industry, foundations, and so forth. Its recommendations for federal action, as they appear on pages 22 and 23 of the report, are as follows:

5. That long-term Federal loans at low interest for the construction of income-producing facilities (such as dining halls and dormitories) continue to be made available to educational institutions.

6. That Federal grants-in-aid on a matching basis be made available, through procedures similar to those provided by the Hill-Burton Act, to assist as many types of nonprofit higher education institutions as possible to construct needed non-income-producing facilities (such as classroom, laboratory, library, and administrative buildings).

7. That appropriate benefits of the slum clearance provisions of the National Housing Act be made available to urban educational institutions seeking to acquire land needed for expansion.

8. That the Federal Government promptly develop and implement a consistent and equitable policy for the payment of full costs, including indirect costs to the institutions, of Federal contract research programs, operating in or through colleges and universities. In addition, as rapidly as feasible, more equitable policies should be adopted for payment for other types of services and programs provided to the Federal Government by these institutions.

. . . . . .

10. That Federal revenue laws be revised in ways which will even more strongly encourage larger contributions from more individuals to educational institutions. Partial credits against taxes due are a way to equalize the advantages in giving between larger and smaller incomes.

A preliminary assessment of the Josephs report

It will, I think, be recognized that the President's Committee on Education Beyond the High School has made a real contribution to public understanding of the problems we face in the coming critical decade. Through its clear, well-organized, and highly readable report, and through its sponsorship of regional conferences and encouragement of State and local planning, the Committee has done much to open the channels of communication between the educators and the several publics whose support and understanding are needed.

Its over-all position on the role of the Federal Government could be described as moderate rather than negative. Where the Committee does not recommend federal action and where it recommends against federal action, its reasons appear to be based on a positive belief in State and local responsibility rather than upon a fear of the old bogey of federal control. In fact, the Committee's balanced discussion of our experience with existing federal programs may do much to place the whole question of federal control of higher education, or the threat thereof, in a proper and very small perspective.

We can infer from its specific recommendations on federal policies, that the Committee was much more inclined to favor the use of federal credit and tax mechanisms to aid higher education than it was to recommend direct federal appropriations. The only new major appropriations recommended were for matching grants to the States for building non-income-producing physical facilities and for an experimental work-study program.

Similarly, we can note that in terms of federal assistance to *institutions*, the Committee's policies would help mainly in obtaining physical facilities, rather than in obtaining more current operating funds or more teachers.

There is also the suggestion at several points in the report, that at some point in the future when the rising tide is really upon us, direct federal aid may be needed in much larger amounts than the Committee is presently ready to recommend.

How do the Committee's ideas on immediate federal policy square with its own analysis of the major problems of higher education? The Committee's analysis, and especially its emphasis on the need for maintaining and improving *quality* in the forthcoming expansion of higher education, will be recognized as basically sound. But, I think that much future debate may center on the relationship between this analysis and the recommended federal policy.

Running through the whole report is the assumption that predicted high enrollments will occur largely without recourse to federal action. Somehow buildings will be found to accommodate 6 million or more college students by 1970 and teachers (or television sets) will be placed in front of these students. But will a wide diversity of institutions be built in the right places? Will high school students be helped to choose an appropriate program in terms of their aptitudes and interests? Will we continue to let 200,000 able high school graduates discontinue their education because of a lack of guidance or of financial support? And will the hundreds of thousands of additional college teachers be able and well prepared for their task?

To these essentially qualitative questions the answers are not at all certain, in the absence of federal action. Granting the Committee's position, which contrasts with that of the Zook Commission, that really massive federal aid for capital or operating budgets is not needed at this time, I would suggest that as a cor-

ollary, and growing out of their own analysis, there may be an immediate federal role in providing strategic assistance to maintain and improve the quality of education beyond the high school.

First on my list would be that "most critical bottleneck"—the impending shortage of college teachers. Tomorrow's teachers are being recruited now, and they take longer to produce than buildings. Furthermore, it is easier to obtain State and local funds (and sometimes private and alumni funds also) for buildings than for raising salaries or for providing the tremendously increased financial support we need for prospective college teachers and for graduate students in general. A large, federally supported fellowship program, for example, aimed as much as possible toward increasing the number of well-trained college teachers, would help to ease the critical bottleneck.

In contrast, matching grants to the States for physical facilities apply to a problem much less critical, at the moment, and to one with which the States and other nonfederal sources are likely to keep up over the next few years.

Second, I would point again to the several hundred thousand very able high school students who annually do not enter college. From this group could come many of the college teachers we will need in the 1960's and other sorely needed professional and scientific personnel. Their presence on the campuses would improve tremendously that qualitative element which is in jeopardy.

I have argued elsewhere[8] that between 50,000 and 100,000 annually of this group will not receive enough help to enter college unless a federally supported scholarship program is established now. Many feel that this is a national problem, and that the Josephs Committee's hope that State, foundation, and other private sources will meet the admitted need is not supported by the facts or by current trends.

An interesting sidelight in the continuing debate on federal policy will be the Committee's apparent revival of the NYA program in its recommendation for a federally sponsored work-study program for college students. This proposal assumes that sufficient numbers of students drop out of college (or do not enter in the first place) because of a lack of part-time job opportunities to warrant direct federal action. In giving priority to such a program over federal scholarships, the Committee may, perhaps, find substantial opposition.

Finally, and without exhausting the possibilities of federal action directed primarily to quality, we can mention the admitted need for comprehensive planning at the State and regional levels, and for much improved and expanded guidance in the schools. In both of these areas, and especially, it seems to me, in the high school guidance problem, consideration could well be given to modest, direct federal assistance to the States.

To sum up, I would propose an interest in improving the quality of our expanding system of higher education, with appropriate federal action, as the cornerstone of federal policy over the next few years, rather than massive, direct federal aid to the States and institutions, which the Committee, I think rightly, rejects at this time.

[8] "Are Federal Scholarships Necessary?" *Proceedings of the Western Regional Conference on Education Beyond the High School* (Boulder, Colorado, 1957), p. 131.

The Diversification of American Higher Education: A Research Program

T. R. McCONNELL[1]

AFTER commenting on the enormous variations in aims, educational programs, organizational structure, and control which characterize higher education in the United States, the Commission on Financing Higher Education stated that

> The main strength of our higher education has derived from and depends upon this diversity which has made possible the notable social achievement of providing higher education to a greater proportion of our population than any other nation and has maintained the freedom of this education by finding its financial support from many complementary but different sources.[2]

Although the commission presented summary data concerning the student body of higher education at large, and although it discussed in general the scope of our higher educational system, it properly limited its principal analysis to the diversity in the support and control of higher institutions. Now there is need for an exploration of other dimensions of educational diversity.

A systematic, though obviously not comprehensive, study of this diversity is under way at the University of California in Berkeley under a subvention from the Carnegie Corporation. The study began with an intensive consideration of aspects and implications of variation within and among educational institutions by a small planning group composed of Dr. John G. Darley, professor of psychology and associate dean of the Graduate School at the University of Minnesota; Dr. Lyman Glenny, associate professor of political science at Sacramento State College; Dr. Leland Medsker, director of the East Contra Costa Junior College; Dr. Floyd Reeves, consultant to the president of Michigan State University; Dr. James Reynolds, professor of junior college education at the University of Texas; and the writer.[3]

The planning group had the benefit of consultation with an advisory committee composed of Jesse P. Bogue, executive secretary, American Association of Junior Colleges; William S. Carlson, president, State University of New York; Henry Chauncey, president, Educational Testing Service; C. W. de Kiewiet, president, University of Rochester; Samuel B. Gould, president, Antioch College; Walter E. Hager, president, District of Columbia Teachers College; Monsignor Frederick G. Hochwalt, director, Department of Education, National Catholic Welfare Conference; Douglas M. Knight, president, Lawrence College; John D. Millett, president, Miami University; J. L. Morrill, president, University of Minnesota, G. Kerry Smith, executive secretary, Association for Higher Education, National Education Association; and Dael Wolfle, executive officer, American Association for the Advancement of Science.

The investigations under way or in prospect have been planned under three headings: (1) the extent of diversifica-

[1] The author wishes to acknowledge the assistance of the staff and consultants of the Center for the Study of Higher Education of the University of California at Berkeley.

[2] Commission on Financing Higher Education, *Nature and Needs of Higher Education* (New York: Columbia University Press, 1952), pp. 54, 187.

[3] Dr. Medsker and Dr. Glenny remained with the project as principal staff members, and Dr. Darley has given considerable time to it; the others have continued to serve as consultants.

tion of student bodies, educational purposes, and educational programs within and among institutions of various types, at undergraduate and more advanced levels; (2) the unique functions and the programs of junior colleges as important means of diversifying educational opportunities, distributing students among appropriate educational programs within and beyond these institutions, and providing facilities to meet a large part of the impending increase in college enrollment; and (3) the state-wide coordination of higher education with particular reference to its effectiveness in stimulating both unity and diversity among institutions, encouraging appropriate differentiation of functions, and avoiding unnecessary or undesirable duplication of educational facilities.

THE FIRST purpose in studying diversity of student characteristics is to assemble a reasonably comprehensive and systematic picture of the *range* and *pattern* of academic ability among institutions of the same general type and among those of different types. The second purpose is to determine, for selected groups of institutions, how students are distributed by ability among divisions or curricula. The third is to reveal net survival in relation to ability and type of institution attended.

Beginning with the now classic delineation of institutional variation in student ability and achievement by Learned and Wood in 1938,[4] scattered reports have appeared of the distribution of intellectual ability in particular institutions or small groups of institutions. Because tests of general academic aptitude are now widely used—in no small part because of the work of Learned and Wood—it should be possible to map more comprehensively the "intellectual surface" of higher education in the United States.

This mapping is complicated by the difficulty of devising an adequate taxonomy of educational institutions, that is, of classifying them in terms of structural differences. The absence of systematic variation in American higher education in fact makes it impossible to arrive at a true taxonomy. One might expect that recognizable differences in function would be associated with gross structural differentiation. Here too, one faces frustration; no such systematic relation exists. Any classification scheme, consequently, is to a considerable degree arbitrary and imprecise.

The classification scheme finally adopted for a national institutional sample, and, where applicable, for other groups of institutions, includes five geographic divisions, five categories of government or control (state, district, private, private Protestant, and private Catholic), and four levels of degrees offered.[5] It is apparent that many differences may exist within any one of these classifications. For example, institutions designated as "state colleges" may vary from those that are still essentially teachers colleges (serving also, perhaps, as junior colleges or liberal arts colleges for many students) to multipurpose institutions in which teacher education is but one of several occupational or professional curricula. Therefore, for certain purposes, some of the categories listed above have been subdivided.

A first step in mapping the intellectual surface of American higher education is to estimate the distribution of general academic aptitude of students who enter post-high-school institutions. In order to make such an estimate, freshmen intel-

[4] W. S. Learned and Ben D. Wood, *The Student and His Knowledge*, Carnegie Foundation for the Advancement of Teaching, Bulletin No. 29. 1938.

[5] The dependence of this classification on United States Office of Education data is apparent.

ligence-test scores are being secured from a sample of 200 institutions which are representative of the more than 1,800 in the United States in geographical location, form of control, and level of degrees granted—the classification system previously described. From this national sample, one can determine the initial selectivity of higher education as a whole, and compare the ability of the student population with the degree of selection proposed in the reports of various commissions.

President Truman's Commission on Higher Education stated that about half the population has the mental ability to complete two years of education beyond the high school, and about one-third is capable of completing an advanced liberal or specialized education. Some of the Commission's critics charged that an attempt to educate such a large proportion of youth would loose a barbarian horde on the colleges and condemn them to mediocrity. Although it did not denounce the proposals of the President's Commission as strongly as some of the other critics, the Commission on Financing Higher Education considered the former's estimates of educability too generous. It recommended that higher education be extended to but one quarter of the population.

The ability levels represented in the national sample undoubtedly will show that we have already gone far below either commission's proposed threshold for admission to higher institutions. We are already dipping into the pool of intellectual talent well below the median of high school graduates and even of the general population; how far below, the data from the 200 representative institutions will indicate. At the same time, of course, as many studies have indicated, we are failing to educate a large number of students with high aptitude.

In addition to estimating the initial selectivity of higher education in general from the national sample, it will be possible to determine the extent of differences in ability within and among *types* of institutions. One may hypothesize that the differences within the full range of institutions will be much more striking than differences among types.

In states where widespread testing of high school students has been done over a period of years, much more intensive studies of how ability of entrants is distributed within and among types of institutions can be made. These investigations are now under way in Iowa, Minnesota, Ohio, Texas, and Wisconsin.

So far, the selectivity of particular institutions or groups of institutions has been expressed in terms of the ability of freshmen. But in American higher education, in contrast with English university education, a great deal more selection takes place *after* than *before* admission. This is true, for example, in many state universities which are required by law or presumably compelled by public opinion to admit any graduate of an approved high school. It is also true of many private institutions in which mortality during the first two years is high. Therefore, the relative selectivity of an institution may be reflected more adequately by the characteristics of students who are graduated from it than by the ability of those who enter as freshmen. Graduates include, of course, not only the original entrants who survived, but also those who transferred to the institution. The distribution of ability of both entrants and graduates will be available for most of the institutions in the states that are being studied intensively, and, it is hoped, for a large proportion of public institutions in other states.

Gross mortality in all types of institutions is high. A preliminary report of a new study of withdrawal by the Office of Education revealed that fewer than four out of ten students are graduated

from the institution of first registration in the normal four-year period. The percentages graduated by types of institutions are: universities, 37 percent; technological institutions, 43; liberal arts colleges, 42; teachers colleges, 36. Fifty-six percent of students enrolled in junior colleges completed two years. From private institutions, 47 percent are graduated; from publicly controlled, 33 percent.[6]

While *gross survival* by ability levels may serve as one indication of selectivity, it does not reflect the total functioning of higher education in a state or in the nation, since it does not provide full data on the persistence of a given body of students. There is a great deal of mobility among American undergraduates. To determine *net survival* at one interval or another, transfers from institution to institution, together with ultimate mortality or survival, must be taken into account. So far as mobility within the same state is involved, this accounting will be a part of the intensive studies in Minnesota and Wisconsin.

Survival may vary, not only with type of institution, but with the relative ability of student bodies within any one type. It is hardly to be assumed, however, that scholastic mortality will be closely related to ability, either of individuals or of groups. It probably would not be too difficult to find two institutions which differ greatly in levels of student ability but which distribute grades similarly. Few absolute standards exist by which to measure student accomplishment, and it is doubtful that the faculty of an institution with mediocre students would apply such standards forthrightly if they were available. For these and other reasons, comparative survival or mortality rates which are not related to levels of ability or institutional grading practices are not very meaningful. The studies under way in Minnesota and Wisconsin will provide data on survival both by levels of ability and by types of institutions, as well as information on the net mortality of large college-going populations.

Data on the ability patterns of present student bodies, coupled with estimates of future enrollments during the next ten or fifteen years point to some sharp questions concerning the nature of the students who should be served, in what institutions, and with what kinds of educational programs. Such questions as the following should be asked and answered by those responsible for higher education:

1. Would it be desirable for certain state universities and perhaps some of the state colleges to establish selective admission standards, or, in the case of those which now restrict enrollment on the basis of ability, to raise their standards?

The University of California has long practiced selective admission. A recent study by Dr. Hubert Semans, specialist in higher education in the California State Department of Education, revealed that only about one-eighth of the graduates of California high schools are eligible for admission to the university.[7]

The median score on the American Council on Education Psychological Examination of freshman entrants to the ten California state colleges in 1952 or 1953 ranged from the 35th percentile to the 60th percentile on the national norms. The lowest quartile scores ranged from the 14th to the 38th percentiles of the nation-wide group of col-

[6] R. E. Iffert, "Dropouts: Nature and Causes; Effects on Student, Family, and Society," in Association for Higher Education, *Current Issues in Higher Education*, 1956 (Washington: National Education Association, 1956), pp. 94–102.

[7] Admission is based not only on level of high school achievement but also on the pattern of subjects studied.

lege freshmen. *A Restudy of the Needs of California in Higher Education*[8] did not propose more selective admission for the University of California, but did recommend that the state colleges raise their entrance standards sufficiently to admit only students who have a reasonable chance of meeting the academic requirements of four-year curricula. The proposal seemed justifiable in view of the fact that California's public junior colleges, now more than 60 in number, do not limit attendance on the basis of academic ability.

The Florida State Board of Control of Higher Institutions recently announced that in the future it will limit admission to students who rank above the 60th percentile of high school graduates. The University of Texas recently established a selective admission policy. Will still other state universities follow suit, restricting enrollment to students capable of superior achievement and limiting their educational programs to those of university level and standards?

2. If state universities generally raise the threshold for admission, and if the social demand for post-high-school education throughout the ability range persists, what institutions will serve students in the lower levels of academic aptitude?

The *First Interim Report* of President Eisenhower's Committee on Education Beyond the High School stated that "It is inevitable that by 1970 . . . larger proportions of the much larger numbers of young people will demand post-high-school education. . . ."[9] Most observers would agree; many of them believe that in fifteen years half the population will continue their formal schooling beyond the twelfth grade. Many of these students, perhaps more than at present, will be in the lower levels of academic ability. If the public four-year institutions, which now to such a considerable extent serve, so far as length of residence is concerned, as great junior colleges, should decline to admit students of lesser ability, where would they go?

There are those who would insist that places need not be found for them. Some time ago a meeting of the Problems and Policies Committee of the American Council on Education was devoted to a discussion of how colleges and universities could meet the coming demand for admission. After various measures had been proposed without too much confidence in their feasibility or attainability, one member stated that no one had yet offered the appropriate solution. "What is it?" the others asked, hopefully. "Why," he replied, "we simply won't take them."

This statement not only indicates that we *should* repel the desire of many young people for post-high-school education; it also implies that this is a decision that higher institutions themselves will be *permitted* to make. It is almost certain that those directly responsible for higher education will *not* be allowed finally to decide how many will go to college. In this country, the people will make the decision, and it will not be in favor of the restriction of educational opportunity to the few. Under this circumstance, the role of educators may well be to attempt to devise more orderly means of pairing students with institutions and programs so that the needs of all can be met without impairing the opportunities of any, particularly the most gifted.

Adapting education to the characteristics and needs of many kinds of students will require a high degree of differentiation resulting in several kinds and levels of education. The University of Cali-

[8] *A Restudy of the Needs of California in Higher Education*, T. R. McConnell, chief consultant (Sacramento: State Board of Education, 1955).

[9] President's Committee on Education Beyond the High School, *First Interim Report to the President* (Washington: Government Printing Office, November 1956).

fornia is able to maintain high standards of admission in no small part because the state colleges and the junior colleges admit students with wider ranges of ability. The university's agricultural colleges, for example, could not require essentially the same standards of admission as the colleges of letters and science, or limit their offerings to highly theoretical and scientific agricultural curricula, if certain state colleges did not offer more practical programs for students varying widely in academic ability. Furthermore, it would be much more difficult for both the state colleges and the university to limit their offering to four-year curricula if the junior colleges did not provide terminal, as well as preparatory, agricultural programs. This division of responsibility *among* institutions may not be feasible in all states. A high degree of internal differentiation presumably will be necessary.

3. *Many private colleges and universities do not plan to increase their enrollments greatly. Some of them are now relatively or highly selective, and may become even more so, while others have student bodies whose average ability is low or whose range of ability is great. Will those that are now unable or unwilling to turn away students in the lower ability levels be able to establish at least modest selective standards?*

The number of private liberal arts colleges which attract and select students of outstanding academic promise, which recruit and hold faculty of high scholarly attainments, and which make rigorous intellectual demands on their students is relatively small. One wonders whether in the next two decades a few more institutions might reach this character and quality. Presumably these would be the colleges which already draw a substantial proportion of promising students and which, when the number of applicants increases considerably, could raise their admission standards still higher. They would be institutions that already have a sound financial base and are capable of strengthening it steadily and substantially. They would be ones which now place a higher premium on intellectual interests and attainments than on other motivations and activities (or distractions).

Dr. James Bryant Conant recently proposed that no more four-year colleges be established, in fact, that the present number be reduced by making some of them into two-year institutions, and that the great increase in enrollment over the next decade or two be accommodated to a large extent in new and expanded junior colleges. The purpose of the remaining four-year colleges would be to lay the liberal background for education in scholarship and the professions.

However sensible Dr. Conant's proposal may be, it is to be doubted that many four-year colleges will become two-year institutions. Instead, with the pressure of numbers, a good many junior colleges may add two years. The four-year pattern has become the standard one in American higher education. And, given the distribution of human traits, not all institutions can cater only to superior students. Although a few four-year colleges may become highly selective, and others may be able to lop off the low end of the distribution of academic aptitude, most of them will continue to draw undistinguished student bodies, though all of them may enroll occasional individuals of unusual capacity.

This variability among institutions which superficially belong to the same type suggests that it is inappropriate to measure them by the same yardstick of excellence. Yet we ordinarily evaluate all of them in terms of some stereotype, some image of "goodness." This image may be engendered by the old school tie, high social prestige, or academic reputation. But whatever its origin,

form, and substance, the single standard is neither fair nor pertinent in evaluating American colleges. Measured against the academic standards of a Swarthmore or a Haverford, another college may be poor indeed. Measured against purposes which are consistent with the characteristics and potentialities of its students and the needs of its community, and evaluated in terms of the success with which its goals are attained (in the personal lives and the civic responsiveness of its graduates), the second college may be a "good" institution.

Yet, it will undoubtedly continue to be difficult for an institution, assessing its students and appraising its limitations, potentialities, and opportunities for service, deliberately to turn from its faculty's—and perhaps its constituency's —present image of academic worth to other, more attainable, purposes and values. Though difficult to make, this adaptation might nevertheless enable many institutions to play a more significant role in the complex pattern of American higher education.

To date, as stated above, there are only scattered reports on the intellectual composition of student bodies. The records of variation in nonintellectual factors are even more fragmentary than those on ability. Yet differences in values, interests, attitudes, and other aspects of personality may be as significant as differences in intelligence in describing diversity within and among institutions. There may well be such a thing as "institutional atmosphere" defined, in part, by the values held by students, faculty, and alumni.[10] This atmosphere may serve as a selective factor. If it is felt or perceived (though possibly not verbalized) by prospective students, self-selection may occur. Alumni may recruit students who "fit." Faculties and boards of admission may choose among applicants those who may be expected to "belong." (Here, too, the criteria for selection may never be formally stated or even verbally defined.) Some "deviates" may of course enter, and a variety of things may happen to them. Some may conform sufficiently to the attitudes and generally accepted behavior of the group (perhaps only temporarily) to be reasonably well accepted. Others may remain, never quite belonging, always on the fringe of the society. Still others may withdraw by choice or, failing to adapt scholastically or socially, may be dropped. Presumably, institutions vary in the cohesiveness and pervasiveness of their cultural, intellectual, or social atmospheres. Some of them may be more homogeneous than others. Large universities may be quite heterogeneous as wholes, while smaller social and attitudinal islands exist within them.

These characteristics of student societies are difficult to define and to demonstrate objectively. The research staff has asked many persons two questions: "On what dimensions of personality might one expect student bodies to differ? What tests, if any, exist for the measurement of these characteristics?" Neither the answers of the respondents nor of the staff have been too promising, but several attempts are being made to determine whether certain student bodies differ in personality characteristics or whether, on a more restricted basis, students with various majors or vocational choices differ in measured interests and personality traits. These studies include the following:

Some 12,000 Minnesota high school graduates of 1952 filled in the Strong Vocational Interest Blank. From the records of those who attended Minnesota colleges, it will be possible to relate measured vocational interests to the choice of major fields of study. Previous studies indicate that students whose

[10] P. E. Jacob, *Changing Values in College* (New Haven, Conn.: Edward W. Hazen Foundation, 1956), pp. 99–115.

choices fall in certain broad categories have different interest patterns. Thus students in the College of Science, Literature, and the Arts and those in the Institute of Technology of the University of Minnesota differ considerably in the order of frequency of interest-families on the Strong test.[11] One wonders whether students who attended different types of Minnesota institutions also differed in measured vocational interests. For example, did those who attended teachers colleges differ from those who went to liberal arts colleges? Or, did those who entered some or all of the small liberal arts colleges differ from those who enrolled in the College of Science, Literature, and the Arts of the university? If the answer to these questions from the Minnesota data is negative, as it well may be for entire student bodies, it may be possible in later studies to push the analysis a bit further. For example, it is conceivable that students who attend small liberal arts colleges may differ, if not in vocational interest patterns, then in the intensity of their interests, from students who attend the liberal arts colleges of large universities. Some students are intent on specialization when they enter college. Others are more "tolerant" of a broad general education. Are the former more likely to attend the liberal arts colleges of large universities with their numerous opportunities for specialization, and are the latter more likely to attend small liberal arts colleges which offer limited opportunities for specialization?

Another attempt to determine whether interest and personality characteristics are differentially distributed among curricula and types of institutions has been made possible by the cooperation of Dr. J. M. Stalnacker, president of the National Merit Scholarship Corporation. About an equal number of winners and runners-up in the 1956 competition were given the Strong Vocational Interest Blank and a "student questionnaire" measuring ten aspects of personality. Of the 973 students invited to participate, 922, or 95 percent, returned completed sets of material. The personality inventories, chosen after extensive study of available instruments, presumably measured (using "trait" names given by various research workers) authoritarianism, responsibility, realism, conformity, sociality, complexity of outlook, energy orientation, independence, thinking introversion, and originality. In addition to taking the tests, the students supplied biographical and background information to supplement that already on file with the Scholarship Corporation.

The data will be analyzed to see whether interest and personality characteristics are differentially distributed among the students who entered different types of institutions in the fall of 1956 and who chose, tentatively at least, different fields of study. It will be interesting, for example, to see whether students who enrolled in liberal arts colleges are different from those who entered technological institutions, or state universities, or privately controlled universities. Certain other comparisons will be possible; for example, students whose major interest is in science may be compared with those who have chosen engineering, or those studying at the Massachusetts Institute of Technology may be compared with those at the California Institute of Technology.

The initial distribution of these students among institutions and major fields of study is not the only subject of concern. Their careers will be followed through college and beyond. The first follow-up has already been conducted. It deals with reactions to their educational experience, possible changes in

[11] J. B. Darley and T. Hagenah, *Vocational Interest Measurement* (Minneapolis: University of Minnesota Press, 1955), pp. 100–102.

educational and vocational choices, and attitudes toward significant social, economic, political, international, and educational issues. Since this is one of the most highly selected groups of able students ever studied, their personal and educational development will be followed with great interest.

Leads from this study of a group of exceptional college students may suggest fruitful means of exploring differences among student bodies of various groups of institutions in noncognitive characteristics. It may be possible, for example, to discover whether differences in the scholarly "productivity" of institutions[12] are associated with differences in interests, motivations, and other characteristics of personality, as well as the ability, of the students who attend them. As Dr. Darley has put it, the merit of certain institutions may lie less in what they do to students than in the students to whom they do it. Actually, of course, productivity probably is the resultant of institutional nurture and promising student material combined.

The research staff is now working on the design of a study, the purpose of which is to reveal the characteristics of students who enter certain institutions with known indices of scholarly productivity and changes in these students in response to the educational and social forces in the institutions. This is but one example of many studies that should be conducted on the relationships of student characteristics and educational programs. One of the most significant of such studies is the one under way at Vassar.[13]

These relationships should be as interesting and significant at advanced as at undergraduate levels. They are being explored at present in cooperation with the Association of American Medical Colleges and the Council on Dental Education through the medium of both aptitude and personality tests.

At first thought, one might expect that since medical education is highly selective, the student bodies of medical schools should not vary greatly in ability. To the extent that the Medical College Aptitude Test is indicative of ability, this is incorrect. There is considerable variation in both freshmen and senior scores from one school to another, one region to another, and one type of institution to another. The same is true of the scores of dental students on the ACE Psychological Examination and on other measures of aptitude for dental education.

The Strong Vocational Interest Blank, the Allport-Vernon-Lindzey Study of Values, and the Edwards Personal Preference Schedule have been administered to seniors and freshmen of 1956 in selected medical schools. The same tests have been given to seniors of 1956 in selected dental schools. The Strong test has been scored on forty-eight keys, including those for two medical specialties. The Allport-Vernon-Lindzey schedule gives scores on theoretical, social, religious, aesthetic, economic, and political values. The Personal Preference Schedule yields scores on fifteen aspects of personality, including such characteristics as achievement (high level of aspiration for accomplishment and success), deference, order, autonomy, dominance, aggression, and change (tendency to do new and different things, interest in experimentation, mobility, and so on).

Scores on these measures of interests, values, and personality characteristics will be analyzed for possible differences from school to school. The scores of senior medical school students will also be distributed according to the type of

[12] See R. H. Knapp and J. J. Greenbaum, *The Younger American Scholar: His Collegiate Origins* (Chicago: University of Chicago Press, 1953).

[13] See preliminary reports of this study in *The Journal of Social Issues*, XII, No. 4, 1956, edited by R. Nevitt Sanford.

practice in which they expect eventually to engage. Preliminary analyses show that the student bodies of medical schools differ as groups in personality patterns, and that different kinds of medical practice attract groups that differ in personal characteristics. These data are interesting in themselves. They should also be useful in the selection and guidance of medical students. They may be valuable in helping a school to choose the particular aspects of medicine it wishes to emphasize and to select students with appropriate levels of intellectual ability and pertinent characteristics of personality. Consider for a moment a specific aspect of this problem.

Apparently a considerable proportion of the teachers and researchers in medicine (as in law), comes from a relatively small number of medical schools (or law schools) of original registration. This leads one to ask whether these schools select or attract students who already have a bent toward research and scholarship and who exhibit other personal characteristics which distinguish them from students who choose careers other than teaching and research, whether the institutions' educational procedures induce these interests and attitudes, or whether there must be a fortunate combination of student characteristics and educational processes to produce scholars and teachers. One would ask, further: If the process of admission is responsible, what methods of selection are used? If the educational process is the principal factor, how do the curricula and methods of teaching differ from those in schools which produce few teachers or researchers?

The dean of one of the medical schools from which many of these people come believes that it does attract students, many of whom, at least, possess at the time they are admitted the interests and other qualities that characterize those who finally choose scholarly careers. He thinks that the student body is the result of both self-selection and institutional selection. Thus, applicants may have formed an image of the medical school in question—its expectations and demands, the nature and quality of its training, its professional and academic emphases. The admissions committee presumably acts with a clear understanding of the school's educational character and a fairly definite picture of suitable students. There are various ways to test these hypotheses. Data from present studies should throw some light on their validity, but definitive tests will require extensive investigation. This kind of research will add significantly to our knowledge of the diversity of higher education.

LITTLE has been said to this point about the over-all pattern of higher institutions in a diversified system. As states plan to meet the growing demand for post-high-school education, many of them are turning to the junior college as a means of absorbing increasing enrollments, diversifying educational opportunities for both young and old, and helping students to choose occupations or plan further formal schooling.

In some states and in many communities, junior colleges, community colleges, or technical institutes already carry a considerable share of the burden of post-high-school education, and will probably shoulder an even greater proportion of the load in the future. In California, for example, the junior college enrollment is nearly half that of the total in all public higher institutions. The University of California plans to admit proportionately fewer lower-division students in the future, and if, as the *Restudy of the Needs of California in Higher Education* recommended, the state colleges also enroll relatively fewer freshmen and sophomores as time goes

on, the junior colleges may have to admit an even greater proportion of college entrants during the next decade.

Other states, Texas, for example, have numerous junior colleges, public and private, some of them long established and well developed. Some states have few or none. But many of the latter are moving to establish community junior colleges as one means of caring for the impending expansion of post-high-school education. In a few states, universities have established two-year branches in outlying communities and these satellites, supplementing the four-year institutions, are offered as a desirable substitute for junior colleges. So rapidly is the junior college movement developing that one of the three principal phases of the California research project on educational diversity is a survey of junior college education in fifteen states. Intensive studies of student characteristics, curricula, student personnel services, developmental history, and community roles of a selected group of these institutions are under way. The results of these studies will be interpreted in a wider educational and social setting.

In appraising the present and possible future service of the junior colleges, it is essential to know what bearing their occurrence in a state or a particular community has on the proportion of the total age group admitted to and graduated from post-high-school institutions. In addition, data should be secured on the proportion of youth in various segments of the total ability range who take advantage of opportunities for formal schooling. Let us assume further that it is possible to find two states, one of which has a fairly large number of junior colleges and the other, few or none, but in both of which the incidence of attendance at post-high-school institutions is approximately the same. Then one would ask: Is there a difference in the type of educational programs at the thirteenth- and fourteenth-grade level? In the one state, are all or most of the students enrolled in curricula which are essentially preparatory in character, while, in the other, students are given a choice between terminal and preparatory curricula? Whether the one or the other of these two situations is preferable is a matter of social and educational philosophy. There are those who believe that, in a society in which the many demand an education beyond the high school, the first responsibility of higher institutions is to eliminate those who are unfit for advanced college or university work. Others believe that it is the responsibility of higher institutions to adapt their educational processes to students whose abilities, interests, and goals require different kinds and levels of formal schooling.

If the latter view prevails, the junior college may become increasingly important in the structure and strategy of American higher education. Among the functions which are usually ascribed to the junior college, the following are particularly significant in a diversified educational system: (1) providing terminal curricula of two years and less in length, (2) providing curricula preparatory to advanced undergraduate education in four-year institutions, (3) aiding students to make educational and vocational choices that are consistent with their individual characteristics, and (4) offering a wide range of general and special courses for adults.

One of the unique functions of the junior college or community college is to provide technical, semiprofessional, or general curricula of two years or less in length adapted to the needs and characteristics of students and to the needs of the community or region. There is some reason to believe that four-year institutions ordinarily do not perform this function effectively, even if they

attempt it. But if they are capable of performing it successfully, the question remains as to whether the need for educational programs less than four years in length can best be met by the expansion and diversification of four-year institutions, public or private, by community junior colleges, or by two-year branches of four-year institutions. It is possible, of course, that all three may be necessary for a comprehensive, adequately diversified system of higher education.

President Herman B Wells of Indiana University asserted at the 1956 National Annual Conference on Higher Education that in most states it will be unnecessary and undesirable to establish new institutions to meet the rising demand for higher education, and he threw in a special word of caution with respect to the creation of junior or community colleges in states which already have a large number of four-year institutions. President James B. Conant of Harvard said some time ago, on the contrary, that "To accommodate the proper expansion of education beyond the high school, a very large increase of expenditures by the states and local communities for these community colleges will be required." This is one of the issues that must be resolved in many states.

One of the purposes of the current junior college study is to reveal how fully, in terms of programs offered and students enrolled, two-year institutions are serving the terminal function. From preliminary surveys there is reason to believe that too few students choose terminal curricula. Here again perception and conception of educational and social prestige determine choice! Students prefer the program which leads (for many fewer than the number who enter it) to four-year colleges and universities. The junior college struggles against this bias, and probably against expectations which parents and even junior college teachers also hold. The way in which the community at large visualizes the role of the junior college also affects its character and destiny. Rumor has it, for example, that some California communities, or at least their chambers of commerce, see their junior colleges burgeoning into four-year state colleges in the near future. These expectations again pose the fundamental question with respect to junior colleges: Are they really unique institutions serving special functions which other institutions cannot or do not serve at all, or do not serve effectively?

THE EMPHASIS in this discussion has been on diversity in higher education—of students, institutions, and educational programs. Students will certainly be no less heterogeneous in the future than they are today. And one assents to the recent statement of the President's Committee on Education Beyond the High School that "to fit increasing numbers possessing widely varying capacities and interests into an increasingly complex civilization, even greater diversity among institutions may be required."

But in the midst of all these pressures toward differentiation, there are also forces leading toward greater unity. One is the movement for a common liberalizing educative experience, however diverse students' specialized education and careers may be. Another is the awareness that differentiation of educational programs may have gone too far in some specialized fields. The *Restudy of the Needs of California in Higher Education* criticized the proliferation of courses and curricula in junior colleges, colleges, and universities in such fields as public administration, business, and education. One suspects that much of the multiplication of courses, and some of the excessive and narrow specialization, is a response to the *demands* of

students or employers rather than the demonstrated *needs* of either. Some of the proliferation also reflects teachers' or administrators' desires for expansion and their propensity for empire-building.

Putting aside the question of demands, it should be possible to arrive at some criteria for determining how much planned variation in educational programs in a broad field like engineering is really needed. This field presumably encompasses a wide spectrum of jobs and abilities. Dr. John Gardner, president of the Carnegie Corporation, recently described this complexity as follows:

> The national need for men with scientific and mathematical competence exists at all levels. It is not just that we need more creative scientists at the Nobel Prize level. Behind the great creative minds in science moves an army of able and superbly trained minds who test and confirm (or reject) new discoveries, conduct the more mundane testing and experimenting of the scientific world, and make the numberless lesser contributions on which the structure of science rests. And beside them works an immense corps of well-trained and skillful laboratory technicians and assistants.
>
> In the industrial world a similar situation exists. In the spotlight are the great designers, inventors, and innovators, but back of them stands an immensely able corps of technically brilliant men to put their discoveries into operation. And back of these men stretch rank after rank of highly trained technicians and mechanics. Only in recent years have we learned that much of the strength and vitality of American technology is in this "training in depth." Several of the leading countries of the world can match us for brilliant men at the top. But we outstrip most of them in competent, excellently trained second, third, fourth, and fifth level workers.[14]

Should the differentiation here implied be primarily a matter of *level* of training rather than of *kinds* of training within levels? In other words, do we need two-year programs for training technicians, four-year programs for the bulk of scientists and engineers, and postgraduate programs of varying length for persons who possess higher intellectual and creative aptitudes? To put the question in still another way, shall students find their appropriate range and type of occupational performance in terms of relative accomplishment in a common curriculum at a given level, or in terms of completion of differentiated curricula presumably corresponding to different kinds of occupational functions?

The engineering agreement drawn up several years ago between the University of California and the state colleges is based on the latter scheme of diversification. To the university was assigned responsibility for more theoretical curricula stressing design, research, and development, and to the state colleges more practical educational programs leading to positions in production, sales, and service.

This sixfold functional classification of engineering activities is reasonably consistent with an analysis and classification of engineering jobs recently made at the Educational Testing Service. It seems clear, then, that there are distinguishable types of engineering work in accordance with which engineering curricula might be differentiated.

But some students of engineering education believe that the trend is toward greater uniformity rather than greater diversity. This is the burden of the *Report on the Evaluation of Engineering* issued in 1955 by the American Society for Engineering Education.

There would seem, then, to be three general ways of differentiating engineering education: (1) according to *level*, with curricula extending from two years or less to graduate programs of varying length; (2) according to *academic*

[14] John Gardner, in "Commentary: Mathematics in Crisis," in *Quarterly Report*, Carnegie Corporation, January 1956.

ability—some institutions might admit only students of superior capacity; or (3) according to the *functions* which engineers perform. The Society for Engineering Education has recently undertaken a study of the preparation of engineering technicians in junior colleges and technical institutes. This might well be followed by empirical studies of the problem of differentiation at undergraduate and graduate levels. This problem is relevant in many other professional fields—agriculture, business, and social work, for example. Its investigation is fundamental to sound educational planning by individual institutions and by states and regions.

WHATEVER the balance of forces leading toward unity and variety may be, a wide range of types and levels of formal education beyond the high school will be required, or at any rate, offered. This will be accomplished, in part, by differentiation of curricula and methods of instruction *within* complex institutions, perhaps greater differentiation than is now practiced in many instances. It may also be attained by more effective division of responsibilities *among* institutions at community, state, regional, and national levels. If, for the moment, differentiation among institutions is assumed to be desirable, it is appropriate to ask to what extent coordination at various educational levels will be required. This is the broad subject of the third of the principal phases of the California research program. The study is at present limited to a description and evaluation of methods of coordinating higher education in twelve states. These methods range from purely voluntary forms of cooperation to highly integrated systems of publicly controlled institutions governed by a single board.

Economy is often the principal reason given for state-wide coordination of higher institutions, or for regional cooperation among them. Economy, if coupled with quality, is certainly necessary and, with growing public needs and demands, is likely to become even more essential. The evidence clearly indicates that we as a people have the resources to finance an adequate system of higher education. But few states can afford the luxury of unnecessary duplication of educational facilities, such as offering a highly specialized curriculum in more institutions than necessary to meet generously the demonstrated requirements of the state or region and to make an appropriate contribution to the nation's supply of highly educated manpower.

Surely no one will construe this to mean that there should be *no* duplication of aims or programs. The opportunity for a general and liberal education should be as widely available as resources will permit. Furthermore, professional and other forms of specialized education increasingly depend on relatively advanced work in fundamental disciplines. This means that it is probably impossible to divide all the basic disciplines among institutions at the undergraduate level, or even at the graduate level. To attempt to do so would be *educationally uneconomical*, even if, on superficial grounds, it seemed *financially economical*. But it should be possible to allocate occupational, professional, highly specialized, and extremely costly programs among institutions to the benefit of the entire state.

In a sense, economy is a negative reason for differentiation of aims and programs and for coordination of institutions. There is a more positive reason for wise coordination. It is to assure the youth and the citizens of a state a range of educational opportunities comprehensive enough to meet the justifiable goals of individuals and the demonstrated needs of a democratic and in-

dustrial society whose specialized requirements, though changing in character from time to time, are seemingly insatiable. The fundamental purpose of coordination, therefore, is to plan and implement a system of higher education commensurate with the needs and possibilities of a people and of a commonwealth.

There are many obstacles to effective coordination. They include the excessive ambitions of governing boards, administrators, and faculties; powerful political, professional, economic, and social pressures; and the complexity of the concrete problems of educational differentiation. In addition, the desire of the people to have many kinds of specialized education locally or regionally available is one of the greatest pressures. General and preparatory education at the junior college level should be rather widely available, liberal education perhaps less so, but nonetheless within reasonable reach. But beyond these general and basic facilities, advanced, expensive programs should be provided in a limited number of places, the exact number depending on demonstrated need for specialized personnel, potential student enrollment, and financial resources.

Descriptions of the machinery for state-wide coordination have appeared from time to time. But there is little evidence, published evidence at any rate, on the effectiveness of present structures and methods of coordination, or on the critical factors involved in successful or unsuccessful performance of the coordinating agencies. In view of the complicated problems that all the states now face in providing educational facilities for rapidly increasing enrollments, without sacrifice of quality or excessive expenditure, it is timely to ask: How effectively, through planning, coordination, and control, do the organization and administration of higher education at the state level contribute to (1) adequate diversity in types of educational institutions and programs; (2) appropriate designation and maintenance of differential functions among the several types and systems of institutions; (3) appropriate allocation of resources and support to types and systems of educational institutions; and (4) maximum utilization of both public and private colleges and universities? The study now under way will throw some light, also, on the problems of how to assure appropriate delegation of administrative responsibility to the heads of constituent units of an integrated system, and how to attain widespread participation in planning.

The purpose of coordinated or cooperative planning in higher education is to assure to all persons equal opportunity to develop their talents to the fullest, and to offer those forms of education needed in a highly industrialized democratic society. The President's Committee on Education Beyond the High School has stated that collectively the institutions and agencies responsible for providing this education should meet the requirements of quantity, quality, variety, and accessibility. One might well add economy, since, with the best management, a greater proportion of the national wealth will have to be spent on higher education.

There is no *system* of American higher education. It is safe to say there never will be. Diversity of support, control, organization, aims, programs, and students will continue to be the most evident characteristics of post-high-school education in this country. But it is not inconceivable that we could attain a more rational diversity than we now have; it should be possible to devise, if not an integrated system, a more orderly arrangement than is likely to emerge when institutions make decisions

without reference to a larger pattern of responsibility.

Neither is a better pairing of students and institutions, or of students and programs, unthinkable. In our society, no agency will assign students to particular institutions. We can assume that students will be free to choose institutions (that will accept them), as institutions will continue to select from those who apply. Furthermore, since it will always be impossible to predict scholastic achievement with great accuracy, more students will be permitted to attempt a program than will succeed in it. Yet better sorting within and among institutions should be possible. Dr. Conant has declared that

> really effective counseling is the keystone of the arch of a widespread educational system dedicated to the principle of equality of opportunity. A democracy, unlike a totalitarian state, cannot force its youth into what the authorities consider the appropriate groove of advanced education. In this republic of free men, no official can decree what line of study must be pursued. . . . How is the sorting process to be accomplished? The answer is by the democratic method of enlightenment and persuasion.[18]

How will the individual find enlightenment? In part, through a better awareness of his own interests, aptitudes, and accomplishments; through information about the requirements that fields of study and occupations make on human abilities; and through knowledge of the particular institution or institutions where he can find educational opportunities appropriate to his personal characteristics and individual goals.

[18] James B. Conant, *Education in a Divided World* (Cambridge, Mass.: Harvard University Press, 1948), pp. 204, 205.

The Professor Looks at the Dean

ARTHUR F. ENGELBERT

In an article which appeared in the *Bulletin* of the American Association of University Professors, Edward York Blewett wrote:

> Once upon a time a dean went to Heaven. You can judge from this opening sentence that the substance of this talk is pure fiction. Now everyone knows that deans don't go to Heaven, and chiefly, I think, because of the pressure which is applied in a contrary direction. Everyone seems to want them to go elsewhere. . . .[1]

There is little doubt that much of this "pressure which is applied in a contrary direction" stems from the group which I represent, the college teacher. I have never known a college teacher who has not had the suppressed desire to become a dean, no matter how fervent the protestations to the contrary. This speaks most eloquently for the high esteem in which college teachers hold the office and for the high demands which they place upon the office of dean.

If the organizational pattern of the typical liberal arts college indicates that the academic dean is the leader of the faculty, it is then not unreasonable to assume that he is the man to whom the individual teacher must look for leadership, for counsel, for due recognition of achievement, and for a friendly hand. For such responsibility certain human qualities are basic: common courtesy, warmth of personality, integrity, forcefulness, and courage. From the teacher's point of view it is not nearly so important that the dean be highly trained in a limited area as it is that he be well-read and broadly trained so as to be able to counsel intelligently the representatives of the many departments that look to him for guidance or, at least, for understanding. He should be open-minded, unprejudiced, and fair.

With these rather general qualities stated, let us consider in some greater detail those areas of the dean's responsibilities which impinge upon the vested interests of the college teacher. What are the qualities a dean looks for in employing a teacher as well as in assessing his work to make decisions on tenure, promotion, and salary increment? The typical dean, if there be such a person, would settle probably for the following: satisfactory training, some experience, favorable personality factors, moral reliability, religious conviction, interest in young people, evidence of effective teaching, and the ability to fit into the college environment with minimum adjustment. It is at this last point that many serious morale problems arise affecting relationships between administration and faculty.

The charge is frequently heard that college administrators place a premium upon mediocrity, that they tend to reject brilliance of teaching and independence of thought in favor of placid conformance, that they are obsessed by the fear of bringing a maladjusted individualist into the institutional environment. If such individuals do find their way into the inner sanctum of the college family before these factors of maladjustment are discovered, they are discouraged, ignored, and made to feel the need to make a change. Like all blanket charges, this too has probably only limited application, but it emphasizes

[1] Blewett, "A Dean Goes to Heaven?" *American Association of University Professors Bulletin*, Summer issue, 1954.

the point, nevertheless, that most thinking teachers sense the need to have a few nonconformists in their midst. George Boas, then of Johns Hopkins University, expressed this when he said:

> Even in primitive tribes, we are told by anthropologists, there are always a few recalcitrant individuals, those whom Paul Radin once called philosophers. The philosopher in this sense of the word is the person who sits on the outside of the ring about the fire and asks questions. He is the uncooperative person whom college deans so heartily dislike, His Majesty's loyal opposition, Hans Christian Andersen's child who saw that the emperor was naked.[2]

The provincial atmosphere so prevalent on many campuses is unquestionably a reflection of this insistence on conformity. Charles Evans Hughes once said: "Our institutions were not devised to bring about uniformity of opinion; if they had been we might well abandon hope." Rabbi Stephen Wise says in the same vein: "The business of the American teacher is to liberate American citizens to think apart and to act together." It is in this same connection that Emerson's warning comes to mind: "You should never try to make another person like yourself, because you know and I know and God knows that one like you is enough."

What may the newly employed teacher expect of the academic dean? Is a personal interview or even a series of orientation meetings enough to embark the new teacher on his career? Do the sporadic reports that come to the dean's desk from students and from colleagues, the size of the teacher's classes, his social acceptance by the college community afford sufficient information on which to make decisions which may lead eventually to the teacher's permanent tenure? There are many who are not satisfied with that.

It is almost axiomatic that the products of our graduate schools have no formal training for the exacting demands of the teaching profession. Nevertheless, these young men and women are placed directly into teaching situations under the assumption that they are able to teach because they know more than the students. Dr. Louis T. Benezet stated in a paper read at the 1953 meeting of the Higher Education Association:

> 1. In the college setting we are making little progress in valid methods for determining whether or not a given teacher is doing a good job.
>
> 2. We are making little progress in helping young teachers systematically become better teachers.
>
> 3. We are making some progress, but not a whole lot, in persuading older staff members to consider means by which they can improve those considerable teaching skills they already possess.

This must be one of the primary responsibilities of the academic dean, to maintain a continuing in-service training program for teachers, an important part of which must be closer supervision of, and more effective guidance in, actual classroom practices. The *prestige* committee on a college campus should be the committee responsible for the surveillance of curriculum and teaching practices. To this end the academic dean can contribute greatly.

Another area of responsibility of the academic dean is the encouragement of scholarly interest among the faculty, both of a predoctoral nature as well as of a postdoctoral nature. Too often the young teacher, once securely fitted into his niche, is permitted to adapt himself comfortably to the prospect of security and long tenure without being made to feel any responsibility for further scholarly activity. Specifically stated, requirements for continued tenure coupled

[2] Boas, "The Humanities and Defense," in William S. Gray (ed.), *Current Issues in Higher Education* (Chicago: University of Chicago Press, 1951), p. 15.

with imaginative programs to provide for leaves, loans, and salary increments should go a long way toward making such complacency impossible.

A serious morale problem among teachers is the failure of college administrations to exploit fully the maximum potentialities of the faculty. Frequently little premium is placed upon merit and achievement. In the name of impartiality, the good teacher, the mediocre teacher, and the poor teacher are all molded into an identical pattern of salary scales, teaching loads, and committee assignments. The only virtue of such a program is the dubious one of making no distinctions. Seeking to allay morale problems, these programs create even more serious ones. Such arrangements take a burden of responsibility from the shoulders of the dean and of the president, but they are scarcely stimulating to the faculty.

Another waste, encountered so frequently, is that the finest teaching resources of an institution are expended upon relatively few students. The most effective utilization of the best teaching talents on the faculty depends, in the final analysis, upon the advisory system. Here again the academic dean has a primary responsibility. If the products of our graduate schools are unprepared for teaching, they are even less prepared for effective counseling; yet they are fitted into a program of academic and personal counseling without any in-service training and often without supervision.

Guy Stanton Ford, in an address delivered at Emory University last year, tells the story of Willard Gibbs. He describes him as a quiet, unobtrusive man, always the last to slip into the faculty meeting and always taking a seat in the farthest corner of the room. He was recognized by very few of his colleagues at Yale, and drew only a minimum of graduate students to his courses. It was only after he died in 1903 that his colleagues came to know that they had harbored in their midst, almost unknown by them, one of the greatest scientists of the nineteenth century. Dr. Ford makes the point that here was a great teacher who had exercised a tremendous influence on the world though he was a teacher without a classroom and with very few students. Mr. Ford might better have drawn the conclusion, it seems to me, that here was an indefensible waste of the talents of a great man who had so much to offer to his students.

The academic dean has certain responsibilities for public relations, and this includes some supervision of the total pattern of college publicity. Even cursory examination of the publicity media of most colleges reveals an imbalance between the academic and the peripheral. The glib assertion that what goes on in the classroom, in the committee meeting, and in the faculty meeting has no popular news appeal is, in effect, badly underrating the intelligence of the constituency to whom our publicity must appeal.

The large amount of coverage given by the newspapers to even trivial innovations in education attests to the popular appeal of this kind of information. The prestige schools in this country, large as well as small, are those schools that have sold the public on their academic achievement. The dean's responsibility at this point lies in keeping open the channels between faculty and publicity office. Significant achievements of individual teachers often pass unnoticed because the teacher feels reluctant to "blow his own horn." A studied effort by some responsible authority must be made to ferret out such publicity matter. A note once a year in the faculty mailbox will not do the trick.

The obligations of the dean mentioned thus far impose an unbearable burden. This then assumes two more obligations,

the obligation to place first things first —to do the important thing—and the obligation to delegate the unimportant. Lewis B. Mayhew's comments in the April 1956 issue of the *North Central News Bulletin* of the Committee on Liberal Arts Education are quite apt:

> Like so many other situations, the potentialities of the [dean's] position are all too frequently not realized in practice. Instead of exercising creative leadership the dean is covered with a mountain of routine, almost clerical detail. Instead of reading widely he almost destroys his vision looking at student drop- and add-cards. Instead of being able to think in terms of the broadest possible implications of his institution's program, he finds himself pre-occupied with the number of chairs in each lecture room.

THE GUIDANCE program both in and out of school has had so much truck with adjustment as the *optimum bonum* that conformity and its by-product mediocrity have been the result. The psychologist or the guidance specialist who seeks adjustment as the end of his efforts can never be more than a handyman or at best a professional plumber. Coupled with the concept of adjustment we often find the handmaiden of activity. Children are supposed to be active. Activity keeps them out of mischief and it is through activity that they learn. Even though we grant the argument, when does the child find time for integration, mediation, organization, and contemplation? . . . The child should be guided so that these fallow periods for thinking and integration occur with sufficient regularity to become a habitual part of his life. When meaning becomes more important than activity, and when insight has become more desirable than adjustment, youth will be better qualified to cope successfully in our competitive society.

Industry wants people who know how to work. The man who presents himself at the gate of a plant should be realistic enough to know the difference between work and play. He must be willing to put out sufficient effort and of satisfactory quality to justify his pay. Too many of our young people are relying upon vicarious experiences or on substitutes for the realities of work experience. . . . Men with dreams, theories, and erudition are trying to compete with the practical-minded, experienced workman who not only understands but also can do.—From "School Guidance Needs from the Industrial Standpoint" by Charles D. Flory in *Vital Issues in Education*, edited by Arthur E. Traxler, published by the American Council on Education, 1957.

The Development of Higher Education in the United States, 1900-1955

ROBERT A. CRUMMEL

THE RESEARCH study reported here was conducted to bring to light in a graphic way the historical pattern of the development of higher education in the United States during the first fifty-five years of this century. From this study it is intended that the reader will more readily perceive trends, drifts, and relationships that will be meaningful. The theoretical and, as it has developed, practical purposes of this study are:

1. To see the extent to which numbers of individuals are associated in some way with higher education.

2. To see the relationships of different types of higher educational programs to one another, that is, the relationships between levels in terms of enrollments.

3. To observe the relationships of enrollments of the sexes to each other, in higher education in general, at varying levels of control or type.

The statistical data used to develop this study were obtained from numerous publications of the U. S. Office of Education. Such data as are used here, covering a large number of years, can be found with a degree of continuity in governmental sources only. Data exclude students in "finishing schools," "academies," "seminars," and "institutes," existing largely in the South and East in the early part of this century. Explanatory notes accompany the tables from which the material was gathered to construct the charts.

It may be useful to point up some of the more discernible relationships, trends, and structural developments in higher education after an analysis of the charts, in the light of the purposes of this study stated above.

Though there have consistently been more women high school graduates (Chart II), there have been more males than females enrolled in higher education (Chart I). The preponderance of female enrollment in two-year institutions for the first four decades of the century (Chart IV) is more than offset by the preponderance of males enrolled in four-year colleges and universities during this period (Chart III). There have consistently been more males enrolled in all institutions of higher education, including two-year institutions, since 1939–40, excepting the years of World War II. The decline in male enrollments in 1952 in all institutions of higher learning reflects the impact of the Korean War and the graduation of many World War II veterans.

The approximate ratio of women to men in higher education up to the Second World War was 40–60. In 1943-44 women constituted 49.9 percent of the enrollment; in 1947–48, 29.8 percent; in 1949–50, 30.3 percent; and in 1951–52, 34.4 percent. The increase of women in higher education is a significant one. Indeed, the significance of numbers of students to institutions of higher education is reflected in the horizontal and vertical growth of higher educational institutions and the level and complexity of each.

The growth of junior colleges and "community" colleges in the last three decades has been phenomenal (Chart V). Interestingly enough, the term junior college first appeared in the *Biennial Reports* of the Bureau of Education in 1924.

According to the Bureau of Education

surveys in 1919–20 there were 109 publicly supported higher educational institutions, of which 99 were four-year institutions and 10, junior colleges. In 1929–30 there were 246 publicly supported higher educational institutions; 117 were four-year colleges, 129 were junior colleges. In 1919–20 there were 42 privately supported junior colleges reported and 148 reported in 1929–30. In the *Biennial Survey, 1946-48*, there were 242 public and 230 private junior colleges reported. The number of junior colleges reporting to the Office of Education in the period between 1917–18 to 1941–42, increased from 46 to 461. The enrollment increased from 4,504 in 1917–18 to 149,854 in 1939–40. Since 1940, junior college enrollment has doubled.

During the period of development of junior colleges which began before World War I, there were many normal schools or one- and two-year institutions of education beyond high school, which, for the purposes of this study, are grouped with junior colleges in Chart IV, showing a combined enrollment of these institutions. It is significant, however, to observe that while junior colleges were in the process of development, these normal and similar types of schools were at their peak of growth and gradually, then sharply, began to decline in enrollment until they have virtually disappeared (Chart V).

Noteworthy, too, are the increases in numbers of degrees granted at the college level and above (Chart VI). While the number of bachelor's degrees granted in 1950 seems to have skyrocketed, the trend of increase seems to be following a steady curve upward. From 1940 to 1952, bachelor's degrees granted nearly doubled, and master's degrees more than doubled, as did doctor's degrees. The ratio of persons continuing on to advanced degrees to those receiving bachelor's degrees seems in general to be on the increase.

Corresponding to the increase in enrollment in various types of institutions of higher education, it is significant to note that over the years there have been equally notable increases in nonresident enrollments (correspondence and extension courses) and in short courses and individual instruction programs (see Table 8). Though this table does not consider all forms of adult education, it should be pointed out that more than 40 million adults have been reported as engaged in some type of educational program, such as agricultural extension, high school adult education programs, industrial training, seminars, and the like.

The demands of an ever-increasing population and an ever-expanding economy require a greater development of the country's human resources. The need for trained manpower for the nation's business, industry, government, and social institutions, together with the narrowing of opportunities for entrance of young folk in the labor market has tended to lengthen the educational process for many. The most important factors leading to this continued increase in college and university enrollments are (1) the greater increase in the numbers of college-age youth, and (2) an increase in the proportion of this age group entering higher education. This study presents the facts of a growth that *has* taken place. Speculation as to future college populations must take into account the trends of the past and the above influencing factors.

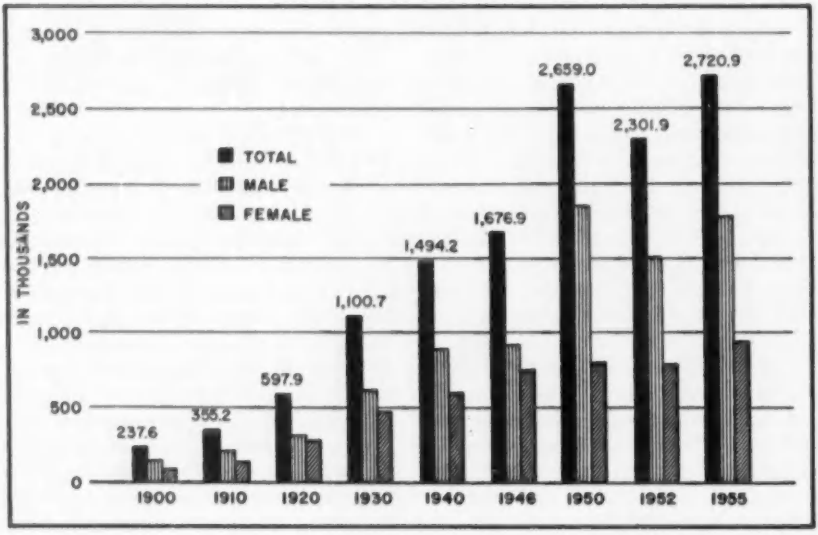

CHART I: Enrollments in All Institutions of Higher Education for Selected Years, 1900-1955, Continental United States except for 1955 which includes data for United States and outlying possessions. Data are for regular school years ending in the years shown except 1955, which are opening (fall) enrollments. (Table 1)

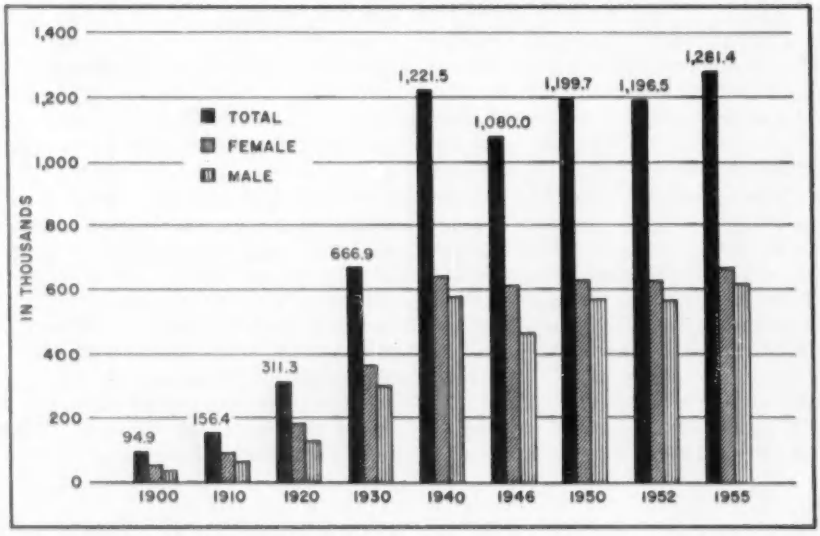

CHART II: Number of High School Graduates, Continental United States, for Selected Years, 1900-1955. (Table 2)

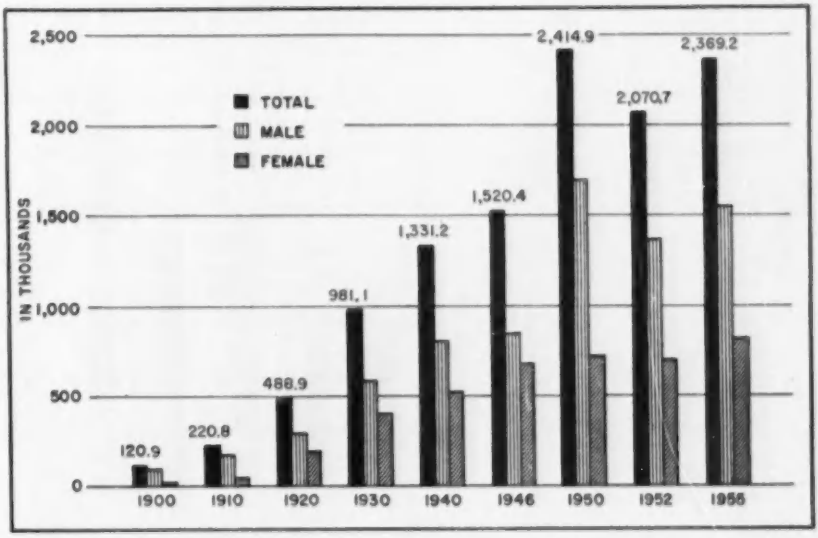

CHART III: Enrollments in Four-Year Colleges and Universities, Including Graduate Students, for Selected Years, 1900-1955. (Table 3)

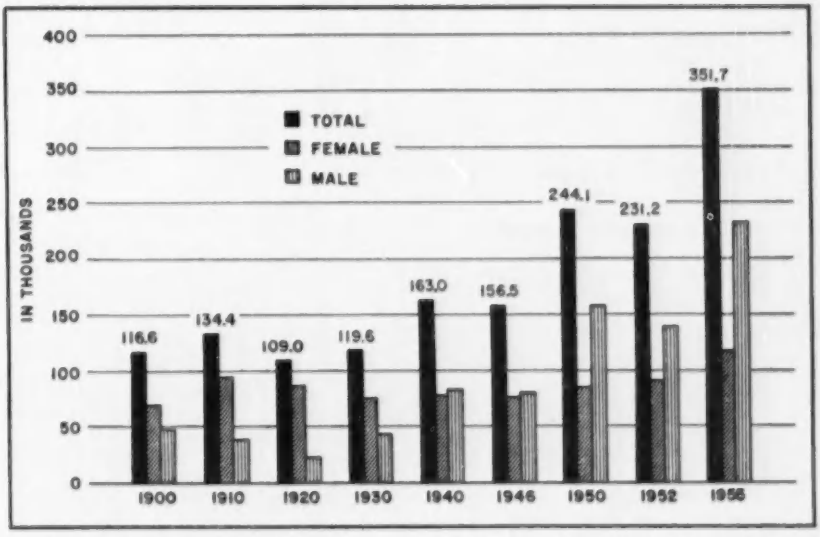

CHART IV: Enrollments in Two-Year Institutions, for Selected Years, 1900-1955. (Table 4)

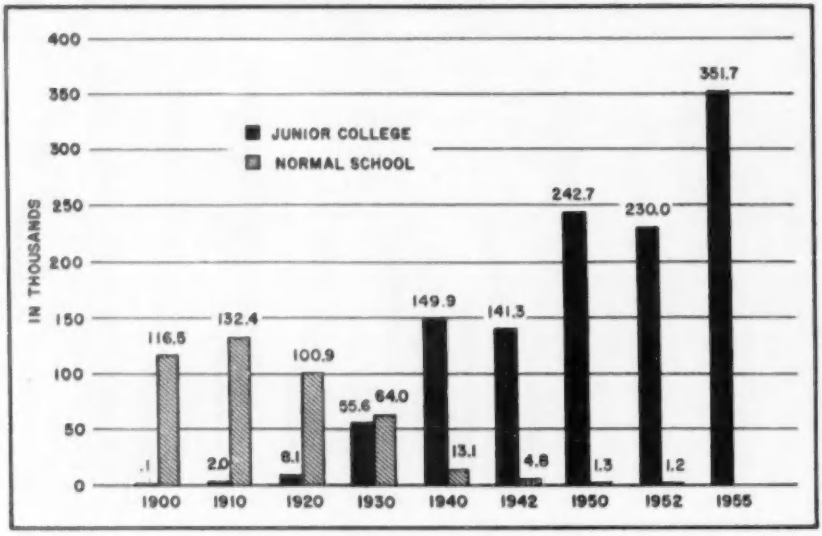

CHART V: Junior College Enrollments, 1900-1955, and Normal School Enrollments, 1900-1952. (Tables 5 and 6)

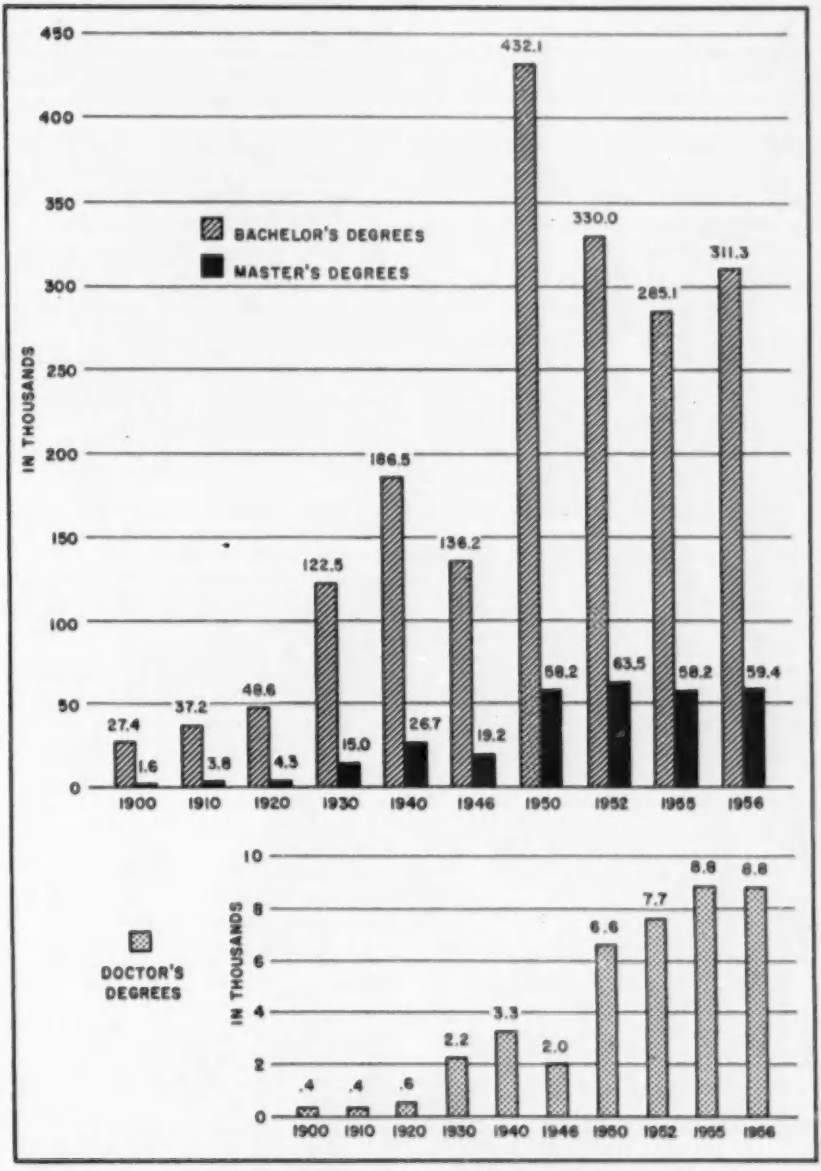

CHART VI: Earned Degrees Granted by Institutions of Higher Education, Continental United States, for Selected Years, 1900-1956. (Table 7)

Tables 1—8: Educational Statistics, 1900-1955

SOURCES: U. S. Office of Education; especially volumes of the *Biennial Survey of Education in the United States* and annual Circulars reporting *Fall Enrollment in Higher Educational Institutions*, and *Earned Degrees Conferred by Higher Educational Institutions*.

TABLE 1: ENROLLMENTS IN ALL INSTITUTIONS OF HIGHER EDUCATION FOR SELECTED YEARS, 1900–1955 [a]

Year	Total	Male	Female
1900	237,592	152,254	85,338
1910	355,213	214,648	140,565
1920	597,880	314,938	282,942
1930	1,100,737	619,935	480,802
1940	1,494,203	893,250	600,953
1942	1,403,990 [b]	818,559	585,431
1944	877,517 [c]	308,894	568,623
1946	1,676,851	927,662	749,189
1948	2,616,262	1,836,339	779,923
1950	2,659,021	1,853,068	805,953
1952	2,301,884	1,510,650	791,234
1954	2,534,709	1,624,220	910,489
1955	2,720,929	1,784,158	936,771

[a] Continental United States for the regular session, September to June, ending in the years shown, except that data for 1954 and 1955 are for United States and outlying possessions and data for 1955 are opening (fall) enrollments.

[b] Includes 4,099 military personnel.

[c] Civilian and U. S. service academies. In addition, military personnel were attending higher institutions in the following numbers: total 277,755; men, 270,034; women, 7,721. An unknown proportion of these students were bona fide candidates for degrees while they were in military programs.

TABLE 2: HIGH SCHOOL GRADUATES, CONTINENTAL UNITED STATES, FOR SELECTED YEARS, 1900–1955

Year	Total	Boys	Girls
1900	94,883	38,075	56,808
1910	156,429	63,676	92,753
1920	311,266	123,684	187,582
1930	666,904	300,376	366,528
1940	1,221,475	578,718	642,757
1946	1,080,033	466,926	613,107
1948	1,189,909	562,863	627,046
1950	1,199,700	570,700	629,000
1952	1,196,500	569,200	627,300
1954	1,276,100	612,500	663,600
1955 [a]	1,281,400	615,300	666,100

[a] Data for 1955 are estimates of the Research and Statistical Services Branch, Office of Education, as of September 1956.

TABLE 3: ENROLLMENTS IN FOUR-YEAR INSTITUTIONS OF HIGHER EDUCATION, INCLUDING GRADUATE STUDENTS, FOR SELECTED YEARS, 1900–1955 [a]

Year	Total	Male	Female
1900	120,943	104,343	16,600
1910	220,775	175,625	45,150
1920	488,905	293,501	195,404
1930	981,113	575,883	405,230
1940	1,331,200	808,979	522,221
1942	1,257,952	743,744	514,208
1944	791,195 [b]	282,997	508,198
1946	1,520,395 [c]	847,584	672,811
1948	2,376,089 [c]	1,675,065	701,024
1950	2,414,942	1,695,321	719,621
1952	2,070,709	1,370,769	699,940
1954	2,207,039	1,425,222	781,817
1955	2,369,209	1,550,279	818,930

[a] Separate tabulations for four-year and specialized institutions not obtainable. Data shown here obtained by deducting two-year college enrollments from total enrolled in higher education. Sex distribution for early years not available. See Table 4, Notes a and c.

[b] Civilian and U. S. service academies enrollment only. In addition, there were 273,114 military personnel attending higher institutions (see Table 1, footnote c). An unknown proportion of these students were bona fide candidates for degrees while they were in military programs.

[c] Includes normal school enrollments, which in 1946 and 1948 were tabulated with teachers college enrollments. Their number is unobtainable separately, but is known to be negligible.

TABLE 4: ENROLLMENTS IN TWO-YEAR COLLEGES FOR SELECTED YEARS, 1900–1955 [a]

Year	Total	Male [b]	Female [b]
1900	116,649	47,911	68,738
1910	134,438	39,023	95,415
1920	108,975	21,437	87,538
1930	119,624	44,052	75,572
1940	163,003	84,271	78,732
1942	146,038	74,815	71,223
1944	86,322 [c]	25,897	60,425
1946	156,456 [d]	80,078	76,378
1948	240,173 [d]	161,274	78,899
1950	244,079	157,747	86,332
1952	231,175	139,811	91,294
1954	327,670	198,998	128,672
1955	351,720	233,879	117,841

[Footnotes for Table 4 at top of next page.]

Footnotes to Table 4

[a] The data are for junior colleges and normal schools unless otherwise indicated by footnote. However, it should be pointed out that some normal schools in the early years were one-year institutions. Includes some few institutions of more than two years, but in all cases of less than four years.

Data are for resident college enrollments only, regular session, September-June, except 1955 are opening (fall) enrollments. Include terminal-type enrollments if students are high school graduates and are enrolled in a course of college-level difficulty.

From 1918 to 1944 enrollments in normal schools declined sharply, while enrollments in junior colleges increased steadily—and after 1940, sharply. For example, in 1952 the total enrollment of 231,175 included only 1,184 normal school enrollments from 26 normal schools.

[b] Statistics for normal schools for the years 1900–1944 are available broken down by sex (see Table 6). No sex breakdown was obtainable for junior college enrollments through 1940. Therefore, for 1900–1940 a sex distribution of three men to every two women has been applied to junior college enrollments, this being the then current ratio in other higher educational institutions.

[c] Civilian enrollment only. In addition, 4,641 military personnel were attending these institutions in the following numbers: normal schools, 49; junior colleges, 4,592. Sex distribution obtained as stated in footnote b above.

[d] Excludes normal school enrollments.

Table 5: Junior College Enrollment, 1900–1955 [a]

Year	Total Enrollment
1900	100
1910	2,000 (est.)
1916	2,363
1918	4,504
1920	8,102
1930	55,616
1940	149,854
1942	141,272
1944	84,616[b]
1946	156,456
1948	240,173
1950	242,740
1952	229,991
1954	327,670
1955	351,710[c]

[a] Includes full-time regular session enrollment, September-June, 1900–1954, and opening (fall) enrollments for 1955, in community colleges, technical institutes, and other higher educational institutions offering less than four years of work on the undergraduate or terminal occupational level.

Excludes enrollments in normal schools (see Table 6) and in adult education, extension, and correspondence courses, short courses, and individual instruction programs except as noted in footnote c, below (see also Table 8).

[b] Excludes 4,592 students enrolled in these institutions while in the military services (see Table 4, footnote c).

[c] Opening (fall) enrollments. Includes normal school and some extension enrollments.

Table 6: Normal School Enrollments, 1900–1952 [a]

Year	Total	Men	Women
1900	116,549	47,851	68,698
1906	133,192	46,316	86,876
1910	132,438	37,823	94,615
1914	115,016	26,826	88,190
1918	138,174	21,287	116,887
1920	100,873	16,577	84,296
1930	64,008	10,683	53,325
1940	13,149	3,342	9,807
1942	4,766	765	4,001
1944	1,706	87	1,619
1950	1,339	223[b]	1,116[b]
1952	1,184[c]	198[b]	986[b]

[a] Includes some nonresident students and students not enrolled in normal courses; includes public (state, city, and county) and private schools.

Normal school enrollments for 1954 and 1955 are included in data for junior college enrollments (Table 5).

[b] Sex distribution estimated on the basis of an assumed ratio of five women to one man.

[c] The existing 26 normal schools in 1952 averaged 46 students per institution.

Table 7: Earned Degrees Conferred in Selected Years, Continental United States, 1900–1956

Year	Bachelor's	Master's	Doctor's
1900	27,410	1,583	369
1910	37,199	3,771	420
1920	48,622	4,301	564
1930	122,484	15,043	2,225
1940	186,500	26,731	3,290
1946	136,174	19,209	1,966
1948	271,019	42,400	4,188
1950	432,058	58,183	6,633
1952	329,986	63,534	7,683
1954	290,825	56,788	8,995
1955	285,138	58,165	8,837
1956	311,298	59,370	8,815

Table 8 follows on page 328

TABLE 8: ENROLLMENTS IN NONRESIDENT COURSES, CONTINENTAL UNITED STATES, 1918–1955

Year	Extension	Correspondence	Combined Correspondence and Extension	Short Courses	Individual Instruction	Total
1918	56,544	15,298	.....	12,096	.....	83,938
1920	.....	.....	83,100	9,240	.....	92,340
1930	195,549	88,417	.....	10,078	.....	294,044
1940	268,868	93,513	.....	101,283	34,063	497,727
1942	269,483	92,904	.....	.....	33,252	395,639
1944	.....	.....	343,338	587,041*	32,296	962,675
1946	.....	.....	535,957	68,739	51,848	656,544
1948	.....	.....	759,909	130,497	41,383	931,789
1950	.....	.....	848,695	151,883	45,103	1,045,681
1952	.....	.....	843,923	192,262	48,627	1,084,812
1954	257,784	147,109	.....	63,337	17,754	485,984
1955	271,473	156,692	.....	57,950	23,787	509,902

* Includes civilian and military enrollments; of this number about 529,000 were military personnel and 58,000 civilians.

Emerging Features of Tomorrow's Higher Education

ASA S. KNOWLES

Every educator is keenly aware that college enrollments are expected to double during the next fifteen years. The widespread publicity given to statistics which reveal the expected increases has prompted many educators to express great alarm as to what is going to happen to our colleges and universities in the future. Nearly every possible calamity has been forecast.

Actually, increasing college enrollments are no new experience to American educators. The records show that during the past fifty years college enrollment has multiplied about tenfold, and during this entire period higher education has prospered, expanded its services, and raised its standards. The principal difference this time is that we have statistics never available heretofore on the likely future growth of higher education.

The expected increases in enrollment are advantageous to society and present to our colleges one of the greatest challenges since their inception. The new numbers are needed to provide additional manpower, particularly in those occupations which require college, graduate school, and professional education. For generations many educators have been preaching the importance of higher education for more and more people. An era is now commencing in the United States when a post-high-school education will be the privilege of a large segment of the population.

Educators today have a widespread understanding of and interest in the revolutionary changes that are taking place in the organization and pattern of higher education in the United States. Quite naturally, therefore, American educators are making plans for the future role of their institutions in our society. They are all well aware that atomic power, radio and television communication, automation, jet transportation, and many other recent technological developments are altering man's concept of space, time, and his own relationships with the world around him. All of this is happening at a time when the population of the United States is expanding rapidly and critical shortages exist in those professions preparation for which requires college, graduate school, and professional education. As a result there is needed a reconsideration of the roles and objectives of our colleges and universities.

Developments which have occurred and others which will stem from these indicate that the future over-all pattern of American higher education will be quite different from that of today. It is now possible to predict some emerging features of tomorrow's higher education which will shape this new over-all pattern twenty years hence. Because they are broad and far-reaching in scope, a review of them should be helpful to present educators as they plan the future roles of their own institutions. These predictions of emerging features are:

1. A widespread growth of new two-year colleges will occur.

2. The majority of new colleges and universities will be public in character.

3. Two years of college education will become a commonplace experience for American youth.

4. Enrollments will exceed present predictions, possibly by as much as 50 percent.

5. The dormitory-type of college campus will become relatively less signif-

icant in the total national scheme of higher education.

6. Commuting students will comprise the largest segment of the nation's undergraduate enrollment.

7. Certain eminent universities will become centers of advanced education, having only a limited number of undergraduate enrollments.

8. Existing colleges and universities will change in size and services to meet the demands of a changing society.

9. New patterns in high school–college relationships will develop.

10. A new definition of educational functions will evolve from relationships with foundations, industry, and government agencies.

11. Except for eminent national centers of advanced education, graduate and professional education will tend to become regional in scope and service.

12. College teaching will become one of the more attractive professions.

13. Centers for advanced education have a vital role in the future of higher education.

In the immediate years ahead—three to five years—there will be a period of transition, one in which the mission and the role of each institution or even groups of institutions may not be entirely clear. Moreover, there will be a period of scrambling for admission to college which will hasten the evolution of these new features.

Widespread growth of new two-year colleges will occur.

During the next two decades there will be a rapid growth in the number of colleges in the United States. When one takes into account all types of colleges—those offering less than the four-year program, four-year colleges, and graduate and professional schools—it seems reasonable to expect that by 1970 the number of institutions of higher learning will be doubled or will be approximately 4,000 in number.

In the years ahead new four-year colleges, both public and private, will be established. Present indications are, however, that viewed from a national standpoint the greatest growth will be in the number of two-year or community-type colleges. While these colleges cannot fill entirely the gap in facilities that will be needed in the years ahead, they will meet the needs of a large segment of American youth seeking post-high-school education. The popularity of the two-year program in the scheme of higher education is revealed by the fact that junior colleges and similar institutions have grown in numbers and enrollments more than any other type of educational institution during the past fifty years. Moreover, educators in four-year colleges have known for many years that 50 percent or more of their students remain in college no longer than two years. While many do not make the grade academically, a very large number leave college for other reasons and would be best served by two-year or community-type institutions.

Factors which will contribute to a rapid nation-wide growth of two-year colleges are:

1. Many parents who want a college education for their children are gravely concerned about the cost of their living away from home while attending college. The community college within commuting distance is seen by millions of families as the solution to the problem.

2. Leaders in communities throughout the nation are becoming aware that shortages of persons having specialized skills can be overcome by establishing community-type colleges. Industry and business are aided and earning power of citizens is increased. In brief, the community-type college is a good investment.

3. There is a growing recognition of the importance of education beyond the high school, particularly in these times when civilization is rapidly advancing. As automation and technological developments increase, more persons who normally would have joined the skilled-labor force will be forced to seek education beyond the high school if they are to maintain or achieve a higher standard of living.

The two-year institutions of this country have already demonstrated their ability to offer programs of study which are the same in content and quality as those offered in the first two years of four-year colleges. Moreover, they have demonstrated a unique adaptability in offering a diversity of curricula in specialized semiprofessional programs.

The physical plants of these institutions will take on a variety of forms. Some will have independent campuses, others will be extension centers or branches of existing universities—often using high school facilities in late afternoons or evenings—and still others will be full-fledged branches or complete new campuses duplicating programs offered by established sponsoring institutions.

Established colleges, and particularly those in urban areas, will see in this trend a responsibility to offer more programs which are of shorter duration than baccalaureate-degree programs to meet the needs of the communities they serve.

The majority of the new colleges and universities will be public in character.

Independent private colleges will continue to prosper and increase in number and size. Private enterprise among colleges and universities is vital to the continued strength of higher education in a democratic society. Many of these colleges will enhance their own position by making special efforts to offer instruction which is distinctive or specialized in character as well as superior in quality.

The church-related colleges may be expected to prosper and expand in number. These colleges offer education of a character and type which is preferred by many in our society.

Another example of the type of college which will increase and expand is the private college whose cooperative work-study program offers a unique and valuable educational experience for youth while helping to solve critical manpower shortages of business and industry. Moreover, the "earn while you learn" feature of these colleges removes an economic barrier to attending college.

Speaking in terms of relative numbers, however, it is reasonable to expect that new public institutions will greatly exceed the new private ones in number. Present indications are that the new two-year colleges will be largely public in character.

There are a number of reasons why this will take place. Every community already has an established board of education, and in the communities of any size it will not be too difficult to expand operations to include the first two years of higher education. Existing public colleges can also expand, or rather reproduce, by establishing extension centers and branches. Particularly in the early stages, arrangements may be made to utilize other public buildings and library and other services. It will be logical for citizens to call upon state and local governments to play a very prominent part in the essential financing of the new ventures as difficulties of entering college continue to mount.

Two years of college education will become a commonplace experience for American youth.

Post-high-school education has already become an expected part of the education of a large segment of our population. The time is near when we can look forward to having 50 percent of the col-

lege-age population attending some type of collegiate institution—a community college, a four-year college, or graduate school.

In 1900 one out of every twenty-five persons of college age (eighteen to twenty-one) went to college; in 1954 this had increased to almost one out of three; by 1970 it is expected that one out of two of college age will be in college. It is conceivable that even this estimate is conservative.

The United States does not have a fixed and rigid class structure. Technical advances mean that men will tend to do less and less unskilled and menial labor. This in turn leads to the necessity of more education. Automation and technical advances in industry are going to force even skilled workers to seek more education to maintain or raise their income and standard of living.

It is logical, too, to assume that as our civilization progresses and becomes more complex, a person will need more education, not only to live a satisfactory life but also to earn a living. Recognizing these facts, one can also assume that the large numbers seeking admission to college will be provided with opportunities to obtain a higher education in keeping with the American tradition. Indications are, therefore, that a college education will no longer be considered a special advantage for a few. Completion of college through at least two years will be expected of young people as high school education is expected today.

Enrollments will exceed present predictions, possibly by as much as 50 percent.

Enrollment of five million students in our colleges by 1970 has been predicted. Several factors indicate that this prediction is far too conservative:

1. A higher percentage of youth today see the need for a college education. Therefore, more will attend college. Enrollments have been increasing during the past few years despite the fact that the number of college-age youth today is at a low point in our curve of population growth.

2. Past experience reveals that as more youth have access to neighboring colleges, more will attend. When predictions of future college enrollments were made a few years ago, the problem of widespread growth of new colleges was not then taken into account.

3. Many will attend college in self-defense, recognizing that a college education is as essential today as a high school diploma was a few years ago if one is to compete successfully for positions of significance in today's world.

4. The number of adults attending college will rise sharply in the years ahead. These numbers may even triple or quadruple. As more persons attain a college education, those adults who failed to attend college will seek more advanced education. Moreover, advancements in knowledge, particularly in the fields of science and technology, will make it necessary for business and professional leaders to look to higher education to keep abreast of these fields.

The dormitory-type of college campus will become relatively less significant in the total national scheme of higher education.

Campuses with residences for students had their origin in a rural society. The numbers seeking to attend college were smaller in relation to the total population, and there were few persons who possessed qualifications to teach college-level courses. It was a natural development, therefore, to establish centers of advanced education in locations satisfactory to their sponsors and then to bring the students and faculty together. Because of population dispersion and lack of travel facilities a large com-

muting student body was an impossibility.

Today, however, ours is an urban economy. An increasing proportion of our population lives in urban centers, and the university or college is essential to the life stream of the urban area. In fact, many professional and graduate schools are best located in an urban area where resources of the urban community can be used for educational purposes. The hospitals needed for teaching of medicine are an example.

In recent years farm population has declined to approximately 15 percent of the total population, while the population of the urban areas has been increasing steadily. Thinking about education and looking ahead, Peter Drucker made the prediction that in twenty-five years resident campuses (dormitory-type colleges) will be obsolete except as they are used for graduate and professional education.[1]

This prediction may sound too drastic, but already there are evidences which tend to bear out the conclusion that this prediction may be fulfilled, at least to the extent that dormitory-type colleges will be less predominant in higher education.

Commuting students will comprise the largest segment of the nation's undergraduate enrollment.

The great bulk of the undergraduate students of tomorrow are likely to be commuting students. This will be particularly true of those pursuing the first two years of higher education. Already, going away from home is less the thing to do for those who reside in urban areas where there are colleges and universities. The automobile has given youth today a mobility and freedom which used to be achieved in part by going away from home. Therefore, living in a dormitory loses some of its attractiveness. It is surprising how many students today commute to institutions offering special programs, often traveling great distances, and many colleges—even those in rural settings—admit freely that growing numbers of their student body live at home and commute to the campus each day. Parking areas are a universal problem among colleges. The region which may be served by a college, so far as the commuting student is concerned, is certainly a fifty-mile radius. In our country today most of the institutions with the highest enrollments are located in urban areas where there are large numbers of commuting students.

In a survey of Ohio colleges[2] John Dale Russell showed that larger numbers of college-age youth attend college in communities where colleges exist. Is it not reasonable to expect, then, that the greatest growth in college enrollments in the years ahead will be among the students commuting to existing institutions as well as to new ones to be established so that students may live at home and attend college?

Certain eminent universities will become centers of advanced education, having only a limited number of undergraduate enrollments.

In this country today there are many so-called "eminent" universities—institutions having graduate and professional schools staffed by distinguished scholars and scientists.

In the years ahead a number of institutions will become essentially national centers of advanced education. Higher education will be greatly benefited if each populous state or region has at least one university whose sole function

[1] Peter Drucker, "Will the Colleges Blow Their Tops?" *Harper's Magazine*, July 1956, p. 63.

[2] John Dale Russell, *Meeting Ohio's Needs in Higher Education* (Wooster, Ohio: The Ohio College Association, 1956), p. 34.

it is to be the center or capstone of the higher education of the area.

The administrators and faculties of those institutions which can fit into this category will not be concerned with expanding undergraduate enrollments and branch colleges. In fact, they will hesitate to make too rapid expansion of their academic facilities lest they have capacities which cannot be justified. They will be concerned with undergraduate offerings from the standpoint of conducting experimental programs to pioneer the introduction of advancements in knowledge into college curricula. They will expand upwards with "centers for advanced study" whose level of work will be beyond that of the Ph.D. It will be their task to strive to improve the quality of advanced research and scholarship. Theirs will be the responsibility and privilege of experimenting in new advancements in higher education.

Every educator appreciates that research in our great universities results in the expansion of knowledge in existing subjects and development of new fields. All of this has an impact on teaching in college, high school, and elementary school. This process of enriching college and school programs of our country must be accelerated in this period when civilization is advancing so rapidly and society is becoming so complex. Every one is aware that our colleges and schools today teach many subjects which were pioneered by research in eminent universities. Sociology is an example of a subject-matter area which was pioneered at the graduate level and is today taught in most colleges and many high schools.

Existing colleges and universities will change in size and services.

Some faculties have expressed an unwillingness to increase in size as larger numbers seek admission to their institutions. Instead they see an opportunity to increase the standards of higher education by being more selective in admitting students. A few even think that by limiting the numbers going to college they will solve the problem which arises as more and more want to go.

No one as yet has satisfactorily defined the right size for an institution of higher education. Those institutions calling themselves small vary in size from less than 50 students to 1,500 and more. In many instances administrators are not being realistic when they express a determination that their institutions will not change in size. The United States is entering a new era of higher education: a period when the institutions are expected to serve the community; a period when private colleges and universities are going to have to justify their concepts of education relative to class size, use of facilities, and so on, particularly if they want financial support of business and industry. Moreover, those which are small in size with limited resources are going to find it is increasingly difficult to compete with larger and better-financed institutions in retaining high-quality faculty and educational programs.

Members of religious groups who want their sons and daughters to be educated in particular denominational colleges will demand that these colleges expand both in size and number, and will contribute financially so that they may do so. Similarly, alumni of many of these institutions believe that private colleges afford a superior type of education and will bring pressures to bear that will result in their expansion in size and number.

The beginning of this trend is revealed by decisions of the faculties of those small colleges and universities which have discovered that they can make use of their educational plant which is now idle as much as 50 percent of the school day. By expanding the number of

classes as well as size of classes and by making only modest increases in number of faculty, they feel it is still possible to achieve high academic standards. Important, too, they feel that they can begin to pay adequate salaries and hold outstanding teachers who might otherwise be lost to them. With some of the innovations in instructional methods, these colleges may do an even more efficient job of teaching in the years ahead.

Some of the two-year colleges will become four-year colleges, and some of the four-year colleges will take on characteristics of universities. The latter will broaden their programs to offer more advanced degrees, particularly in teacher training. This will be desirable and will increase the number of teachers available to serve both the present public school system and the new community colleges which will be established. Other four-year colleges, however, will be forced to go in the opposite direction, or may even prefer to become strong junior colleges rather than mediocre four-year colleges. Some have already indicated a willingness to become the public junior colleges of small cities.

As new colleges make it possible for more and more students to attend while living at home, the established large universities will devote more and more of their physical plants to serving those who seek advanced graduate and professional education. Although they may appropriately welcome freshmen and sophomores living within commuting distance of their campuses, many will see wisdom in adopting the policy of serving only those undergraduates who have special interests and aptitudes and those for whom local colleges are inadequate.

New patterns in the high school–college relationship will develop.

The foregoing emerging features may have an impact on the nation's educational system as a whole, modifying the traditional high school–college relationship. The widespread development of the two-year college may result in an acceleration of the so-called "6-4-4" program of education. Two decades from now many small cities or urban areas may boast that they offer free education from kindergarten to a degree. The degree may be the traditional associate's degree or even a bachelor's degree, as recommended by former President Conant of Harvard University in his book, *The Citadel of Learning*. He states:

> I would like to repeat, however, a recommendation that may be regarded as heretical but in the light of a realistic analysis of American colleges is not so heretical as it sounds. This is that two-year colleges regularly accord a bachelor's degree (with some appropriate designation) to their graduates. I am well aware of the distress that such a proposal arouses in four-year colleges and universities. "Lowering of standards" is the cry. But if any objective study were ever made of the standards now prevailing for the awarding of a bachelor's degree by four-year institutions, it would be evident that no standards (other than tuition paid and years of exposure) are in fact in existence. We have, long since, in the United States abandoned the ideal which still holds in other nations, that a degree is equally valid no matter what institution may award it.[8]

While Dr. Conant was not recommending a "6-4-4" program, it is certainly conceivable that an associate's degree could be given at the termination of this program. If we speed up the educational process and lengthen the school year, the educational achievement under the "6-4-4" program could be as significant as accomplishments made by those who graduate from today's junior colleges after twelve years of previous schooling.

The "6-4-4" program will tend to de-

[8] James B. Conant, *The Citadel of Learning* (New Haven: Yale University Press, 1956), p. 75.

velop in the smaller cities because the separate two-year colleges will prove too expensive in facilities, libraries, and staff. Not many of the smaller cities, for example, could afford to solve their problem of providing higher education for youth by expanding upwards, just as few can afford both a vocational high school and a technical institute. It will be a natural development, therefore, to merge the program with the existing system, making the program six years of elementary, four years of high school, and four years of combined senior high school and college. This development hinges on longer school years and programs of study that are rearranged in content and sequence of subject matter.

There will also be greater flexibility in the length of the academic year and programs leading to various degrees or certificates. Many studies are now aimed at speeding up the educational process for better qualified students. More institutions will be prone to accept bright, well-qualified students when they can demonstrate their ability to do the level of work offered by their particular institution. The University of Chicago admits to certain bachelor programs those qualified to undertake college work after the sophomore year in high school. There is an increasing awareness among students today that they can shorten their stay in college by taking extra courses and by attending summer school and evening classes.

Recently the Johns Hopkins University announced the shortening of the time required to earn the degree of doctor of medicine and to begin practice. Students are to be admitted to medical school after two years of college work. Of course this in itself is not new and sounds like a reversion to the old premedical program. Actually, there is a new arrangement of subject matter offered during a longer academic year which will make it possible to qualify for a B.A. degree two years after entering medical school. It will permit covering as much subject matter as is now covered and completion of internship so that the student may begin practicing at age twenty-five—assuming that he or she entered college at the age of eighteen. Here is a pattern which may well become one of the emerging features of tomorrow's higher education.

As a result of the rethinking about higher education today the instructional processes of our colleges will also take on a new look. The reappraisal of the instructional process has been due in part to the expected shortages of faculty and in part to the many appraisals and self-studies which are taking place on college campuses.

Teaching methods will be substantially improved as modern techniques of communication are adopted. Television will stimulate the preparation of dynamic visual material and its use in the classroom and library. TV programs and kinescope recordings will improve instruction in at least two general areas. One of these is the presentation of complex structural relationships far more effectively than can be done by means of blackboard, chalk, or even simple models. Educators have hardly begun to explore the possibilities of explaining the theory of such subjects as accounting and calculus with the help of modern visual dynamics. The second general area is the presentation of attitudes and emotional feelings in connection with psychology, sociology, the humanities, and so on. In this respect the term visual "aid" will become a misnomer. When the potential of visual dynamics is realized as a teaching technique, it will be necessary for the student to see and understand the visual presentation before he can do his homework.

Visual dynamics should become the most significant change in media for thought and communication since the

invention of printing. Libraries will contain not only printed materials, but films and tapes of dynamic visual material, and each library and each study will have viewers for this material. All of this will not change one bit the importance of personal contacts between the student and teacher. It will enable the teacher to spend more time in conversation with students and answering questions, eliminating the necessity for repeated lectures and these explanations which can better be presented through modern media.

A new definition of educational functions will evolve from relationships with foundations, industry, and government agencies.

During the nineteenth century higher education was concerned primarily with teaching and academic scholarship. With the advent of the new scientific departments there was increasing emphasis on having professors conduct research also. During recent decades there has been a substantial increase in sponsored projects within institutions of higher education. Funds for these special projects come from charitable foundations, government agencies, business associations, and individual business firms. Sponsored projects are in the areas of applied research, product development, basic research, and product-testing. Some projects are for the teaching of special courses limited to the employees of the industry or sponsoring government agency. Many prominent universities have a large segment of their professional staffs employed primarily on sponsored projects.

Here we have a new concept of the functions of an institution of higher education—service to the community in the form of research or special teaching on a contract basis. One reason for the expansion of this function was the need of the nation during World War II for research and teaching services which colleges and universities were in a position to provide. Another reason for this development has been the need for additional funds on the part of educational institutions to carry on normal functions. With increasing costs of research facilities and staff it was natural to perform research which would be paid for by an outside sponsor. Contracting institutions were able to expand their staffs and facilities and grow in general public stature, something not possible within the limits of student fees and endowments.

Sponsored projects have been of great benefit to the community. The resources of higher education were made available to the nation in time of war, and progress in many areas has been stimulated by the peacetime projects of the last decade. They have helped bridge the gap between the ivory tower and the market place; they have brought knowledge to the persons who have been able to apply this knowledge to the solution of practical problems. They have contributed to the development of the idea that community colleges provide important services to their local communities.

Serious questions may be raised in connection with the trend toward a closer relationship with industry and government agencies. Can the university become a participant in the market place without losing its great value as an "ivory tower"? Is there any real academic freedom when professors must seek a sponsor before they can begin a research project or even keep their jobs from year to year? Isn't it the proper function of a university to extend human knowledge even though this may be unpopular in some parts of the surrounding community? Should institutions which are tax-free pre-empt the business of consulting firms and private research organizations?

The principle of academic freedom was developed in terms of the freedom

of the professor to express his views without fear of retaliation. Under present-day circumstances the principle of academic freedom may mean little if professors, in order to hold their appointments, must find sponsors for each investigation they may wish to undertake or if they must conduct research only on projects chosen by sponsors or potential sponsors.

College officers in charge of research, however, often take the viewpoint that sponsored research does not interfere with academic freedom so long as the professor is free to accept or reject a research project. They feel, too, that academic freedom prevails if those sponsoring the project do not interfere with the independence of the professor in pursuing his research and reaching his conclusions.

In order to be certain that colleges and universities maintain an identity as independent institutions, there will be in the years ahead a growing insistence on the part of faculties that sufficient institutional funds be provided to support research of the faculty member's own choosing as well as research which others are willing to finance. In other words, more research will be supported by endowments and grants without strings attached as well as by contracts.

The conflict between basic research and community service will be solved in different ways by different types of institutions. Centers of advanced study will be solely or primarily concerned with the advancement of abstract knowledge, not the solution of immediate and practical problems. Other institutions will tend to concentrate on the activities which bridge the gap between advanced theory and practice. They will establish graduate and professional centers in cooperation with industry as well as offer programs of education leading to professional degrees. Many personnel with Ph.D. degrees will be shared by universities and industry to the mutual advantage of both. In smaller communities the junior colleges will provide adult programs and even perform laboratory testing when there are no private laboratories available in the area. The community service of regional and urban institutions will be backed up by the essential basic research performed at the centers of advanced study.

Graduate and professional higher education will become regional in scope and service.

Enrollment in undergraduate professional schools, such as engineering, business administration, and education, will grow rapidly as larger numbers seek admission to college. Manpower shortages and emphasis on career objectives requiring professional education will attract an increasing portion of undergraduate enrollment into professional schools. Within a few years the number seeking admission to graduate professional schools and other graduate programs of study will expand greatly also. Indications are that present space and faculties can accommodate the growing numbers in the immediate future but that during the next two decades the rate of increase will be so great that graduate schools must expand both in size and number. In the long run the nation will be best served if leaders of institutions of higher learning will cooperate in establishing new schools so as to avoid unnecessary duplication of services within given areas.

It may not be necessary, for example, for every state or region to have a college of veterinary medicine, nor may it be either desirable or necessary for every state or region to have a professional college of engineering or college of law. By joint planning on the part of educators in various regions of the nation, new professional schools can be established to serve larger segments of our popula-

tion to better advantage at lower cost. In instances where professional schools involve tax support, those states which cannot justify maintenance of separate professional schools should provide scholarships or fellowships to send citizens of their states to professional schools designed to serve regions.

The Southern Regional Education Board has a program which facilitates regional interchange of students, taking into account these very principles. There will be others. Moreover, it seems almost inevitable that there will be some reorganization of existing professional schools, both public and private, to the end that resources available for supporting graduate and professional education are used to greatest advantage.

College teaching will become one of the more attractive professions.

The payment of adequate salaries will make college teaching a much more attractive profession to many. This will result in a melting-away of shortages of supply which may be somewhat acute during the next few years.

College administrators are already experiencing difficulties in employing teachers in many fields. Logically, they are concerned as to the future supply of competent teachers. There will always be those recruits who have a sincere desire to teach and lead the life of a scholar. As in the past, too, prestige and titles will attract others into teaching, but financial reward is a strong incentive to enter any profession.

Shortages of supply, necessity of competing with industry and business for available personnel, and continuing inflation will combine to force substantial upswings in faculty salaries to the extent of perhaps doubling salaries within ten years. Colleges now paying relatively low salaries will be required to pay salaries on a par with those paid by institutions having larger resources if they are to retain and attract competent teaching staff. Larger classes, higher fees, as well as use of new teaching techniques and expansion of enrollments by use of existing capacities of the campus, while holding faculty at or near its present size, will help colleges which are less affluent to pay higher salary rates.

Centers for advanced education have a vital role in the future of higher education.

The emerging features of higher education which have been predicted are those which are broad in scope and which may be expected to develop during the next two decades. There are others—some narrower in scope or of significance to a few types of colleges only, and still others which will stem from these new features once they begin to emerge.

From the standpoint of the future of higher education as a whole it is most important that centers for advanced education emerge and play their role to the fullest. Their task will be to provide educational leadership and statesmanship essential to the future welfare of higher education. When one appreciates fully how important the welfare of higher education is to the nation, one can only hope that in the years ahead we can have the kind of educational leadership that can see the vision and rise to the challenge.

Missouri Undertakes a State-wide Study

ALLAN O. PFNISTER

In the report of a survey of Missouri higher education recently completed by the Committee on the Accommodation of Missouri College Students, the colleges and universities of the state were told to expect by 1970 to be called upon to serve between 40,000 and 50,000 more full-time students than they presently have facilities for. They were also told that if they hoped to maintain the present ratio between full-time students and full-time faculty members (16 to 1 for the institutions of the state as a whole), they would have to secure almost 3,000 more full-time teachers than are currently employed. The colleges were urged to set up a continuing committee to study and to plan ways for meeting the expected increases in enrollment. The report was presented in mimeographed form at the April meeting of the Higher Education Division of the Missouri State Teachers Association.

The survey on which the report was based covered all higher educational institutions in the state, both public and private. The survey was probably unique in that it was sponsored by an association of teachers and administrators, the members of the Higher Education Division of the Missouri State Teachers Association. The funds to carry on the survey were provided through the institutions represented by the teachers and administrators holding membership in this division. Arrangements were made with the writer in June 1956 to direct the survey and to spend a six-week period in August and September visiting the campuses of the 41 institutions participating in the survey.

Harry Crockett, an advanced graduate student at Washington University, St. Louis, assisted in the initial stages of the project, and an advisory committee, consisting of Oliver F. Anderhalter (Saint Louis University), Paul J. Campisi (Washington University), and Robert L. McNamara (University of Missouri), devoted considerable time to assisting in the structuring of the study and to reviewing reports on the data collected.

The survey revealed that for 1955–56 almost 53 percent of the total full-time enrollment was in tax-supported institutions and that approximately 27 percent of the full-time students were enrolled in institutions under denominational control. The survey also showed that enrollments were concentrated in the larger institutions; over half of the total full-time students were in attendance in Missouri's five universities. The most rapidly growing institutions in the state are the six tax-supported undergraduate colleges. In 1946 these institutions enrolled approximately 13 percent of the total full-time student population in the state; in 1955 the same institutions enrolled over 21 percent of the total full-time student population. The opinion most frequently expressed by college and university administrators in the state was that in the future the proportion of students enrolled in tax-supported institutions will undoubtedly be considerably larger than it is now.

The Committee on the Accommodation of Missouri College Students showed in the report that if the Missouri college enrollment ratio should in the future increase at the same average annual rate at which it has increased over the past thirty years and if the expected increase in the number of

college-age youth is realized, the total enrollment in Missouri colleges and universities could climb to over 170,000 persons, of whom around 117,000 would be full-time students. This would be an increase of almost 145 percent in enrollments between 1955 and 1970. This would also mean that by 1970 for every 100 persons aged eighteen to twenty-four in Missouri, over 32 would be enrolled in Missouri higher educational institutions.

When it initially reviewed these projections, the committee felt that a total enrollment of this magnitude was overly optimistic and asked that a "moderate" estimate be prepared on the basis of a stabilization of the enrollment ratio by 1970. In preparing the second estimate, it was assumed that up to 1960 the enrollment ratio would continue to increase at the same average annual rate at which it had increased over the last thirty years but that it would then begin to level off by 1970, at which time there would be no noticeable increase in the ratio itself.

Using this reasoning, the committee arrived at an enrollment ratio in 1970 of somewhat over 26 persons enrolled in Missouri higher educational institutions for every 100 college-age youths. This approach gave a figure of approximately 140,000 for the total enrollment in 1970.

As the study progressed, the committee continued to accept the moderate projection as the most realistic, but it became less and less inclined to dismiss the possibility that enrollments would reach the higher level. Recent trends in rural-urban migration in Missouri, the increased demand for more specialized training for more persons, the rapid growth of adult education programs—these, and other factors, made the committee feel that a total enrollment of 170,000 in 1970–71 was not so fantastic after all.

With respect to educational facilities, the survey revealed that some Missouri institutions are already overcrowded. In some instances the student-faculty ratio has reached more than 28 students per faculty member. Taken as a group, during the academic year 1955–56, the six tax-supported undergraduate colleges enrolled a full-time student body equal to over 88 percent of their estimated capacity. The private junior colleges as a group enrolled over 86 percent of the students for which they possessed educational facilities, and both the public junior colleges and the universities enrolled almost 80 percent of their estimated capacity. Least crowded appeared to be the private liberal arts colleges, where the enrollment for 1955–56 constituted approximately 74 percent of the total number of students that could be accommodated in existing educational facilities.

On the basis of preliminary statistics for the fall 1956 enrollments, the public colleges enrolled almost 95 percent of their stated capacity, the universities slightly over 80 percent of their stated capacity, and the private liberal arts colleges somewhat over 78 percent of their stated capacity. Individual institutions within each of these groups were operating at full capacity.

When compared with the United States as a whole, the Missouri higher educational institutions appeared to be enrolling a fair share of the American college and university population. In 1955, Missouri possessed 2.5 percent of the total population of the United States and enrolled approximately 2.4 percent of the total number of students in American colleges and universities. Missouri also awarded 2.4 percent of the total number of degrees granted in the United States in 1954–55, but only 1.9 percent of the total number of doctorates granted for the same year. In terms of performance in relation to ability to

support higher education, however, Missouri ranked quite low, about thirtieth among the 48 states.

The survey report pointed out that the anticipated increases in enrollment will probably not affect all Missouri higher institutions equally nor will they affect all levels in the same way. Typically, the lower-division classes (freshman and sophomore) constitute the major portion of the student body. In the future, while there will be some pressure at all levels, the most serious pressure will be at the lower division. The steady broadening of the base of higher education through the increase in the proportion of college-age youth in attendance accentuates this skewed distribution. Some senior colleges will be able to increase the number of students in the upper-division classes (junior and senior) without serious problems, while they will be hard-pressed to take additional lower-division students.

During the survey it was suggested that such a situation might argue for expanding existing junior colleges and establishing new junior colleges and two-year technical institutes. These possibilities were discussed with administrative officers of Missouri higher institutions. The report shows that reactions were mixed. Those opposing the establishment of new junior colleges raised questions of location and financing. Those favoring the establishment of new junior colleges emphasized that in Missouri state-wide financial assistance would be necessary.

In the survey report the Committee on the Accommodation of Missouri College Students recommended that the state make a careful study of the possibility of establishing new kinds of institutions to meet the new demands that will be facing Missouri higher education. The committee did not advocate any special type of institution, but it indicated that the matter should be thoroughly investigated and discussed.

The committee also recommended that Missouri higher institutions give serious attention to their role in providing training in specialized areas, particularly at the graduate level. The committee opposed indiscriminate expansion of curricular offerings, but urged the institutions of the state to study the need for specialized training in the state. The report also noted that the opinion rather commonly expressed among the colleges in the state was that the anticipated increase in enrollment will have a detrimental effect on educational standards. High student-faculty ratios, heavy teaching loads, and great numbers of poorly prepared entering students were cited by the colleges as factors that will inevitably force standards down. While the committee did not debate the point that huge enrollments will create serious problems, it did indicate that the institutions of the state should attack the problem with greater imagination.

The committee called for study and experimentation to determine more effective means of teaching, ways of improving conditions of faculty service, and new ways of organizing the curriculum. The report was presented as a first step toward the continuing cooperative study of higher education in the state. The committee urged that more intensive studies of factors affecting college attendance in Missouri be made. It also urged that the institutions participating in the study explore ways and means for establishing a more formal organization of public and private institutions in the state for the purpose of engaging in discussion of mutual problems and of sponsoring studies that would be of mutual benefit.

The Higher Education Division plans to publish the entire report and, in addition, a brief résumé of the main conclusions of the study.

Enrollment Trends and the Independent and Church-Related Colleges of Tennessee

DAVID A. LOCKMILLER

OF PARTICULAR interest to college and university people is the fact that a new dimension has been added to the nation's manpower problem—the *quality* of our men and women. Common labor and muscle are not sufficient. The atomic, supersonic, automation age will demand much more of what we already have plus new creativeness, skills, and understandings. Truly the head, hand, heart, and spirit will be taxed if man is to discipline himself and master the forces of the world and outer space. More than ever before, education, especially higher education, holds the key to destiny.

American history has been characterized by an abundance of material resources and a shortage of manpower. Only during the early 1930's was there any long period of unemployment. Up until the Great Depression, immigration was an important factor in population growth, averaging about 650,000 persons per year between 1900 and 1925 and about 60,000 a year until 1945 when it climbed to 200,000 annually. Birth rates declined during the first four decades of the present century, reaching an all-time low in the 1930's.

Since 1940, however, more than 55 million babies have been born in the United States. Today the birth rate is the major factor in population growth, and if it continues we shall have about 200 million citizens in ten years. Furthermore, people are living longer and the average working life of man has increased from thirty-two to forty-two years.

We are already aware of some of the implications of the high birth rate on elementary and secondary education. What are the implications for higher education generally and for Tennessee in particular?

The need for college men and women has increased greatly since 1900. As late as 1930 there were only 1.1 million students in college, as against more than 3 million today. Despite this fact, only four out of eleven high school graduates who are qualified go to college. The percentage is generally lower for Tennessee and the South. Many reasons are advanced for this failure of students to continue their education, but in these days of high wages and salaries, student-work jobs and unused loan funds, and parking problems on every campus, I am convinced that the chief obstacle is not lack of funds but lack of motivation. Regardless of this, however, the total number going to college—and I am not thinking of adult education and extension programs—will increase rapidly during the next decade. By 1965 it is estimated that there will be 5 million students enrolled, provided the colleges and universities can find the space and the teachers to accommodate them.

Tennessee will not face the problems of New York, Florida, and California, but estimates of the increased college population in this state range from 50 percent to 75 percent. The average will vary from school to school, running higher in state institutions and in colleges located in urban centers. The facilities of all institutions will probably

be taxed, but much will depend on the quality of educational programs, tuition charges, and admission requirements.

Some schools want to grow, and others believe in small and carefully selected student bodies. Without debating this point and affirming my belief in democracy in higher education, I sincerely believe that part, perhaps one-fourth, of the problems of the enrollment bulge would be solved if remedial English and subfreshman mathematics could be returned to the high schools. This would improve the colleges and high schools and save time, money, and embarrassment to the students concerned.

In making this assertion, I am not trying to be critical or force a sudden revolution. Times are changing and "terminal education" will have to make room for "preparatory education," and colleges and universities will have to devote their full energies and resources to being true institutions of higher learning. I am not urging an intellectual elite, but perhaps the day is at hand when "Joe College" and "Betty Coed" can be weaned from textbooks and group opinion to serious individual study and independent thinking. College Board Examinations or their equivalent will become commonplace, and the library may be as popular as the student union.

Although the University of Tennessee has been serving the state with distinction since it was started as Blount College in 1794, the church-related and independent colleges and universities dominated the field of higher education in Tennessee until World War I. The more recent state institutions date from about 1910. From the early 1920's until the end of World War II, college enrollments were almost equally divided between the public and private colleges and universities. Since 1945, however, the trend has favored tax-supported institutions. According to the figures in the U.S. Office of Education *Directory* for 1955–56, some 40,183 students were enrolled in the forty-four colleges and universities of the state during the fall of 1954: 21,744, or 54 percent, in the seven state institutions and 18,439, or 46 percent, in the thirty-seven independent and church-related colleges.

This trend is likely to continue if public funds are made available, but the imbalance in what is sometimes referred to as the "dual system of higher education" raises the question: How far and how fast? This matter is receiving serious study by the Governor, the Legislative Council, and others concerned. It is also bringing about some soul-searching on the campuses of private institutions and among the leaders of their sponsoring church groups and constituencies.

The independent and church-related colleges are anxious, willing, and, in many cases, able to carry their fair share of the increased enrollment during the next several years. A recent survey by the Association of American Colleges of 515 institutions having four-year programs in the liberal arts reveals that most are prepared to expand. These schools were asked to project their enrollments on two hypotheses: (*a*) that their present endowment and capital equipment would remain as at present or would be increased in a manner definitely foreseeable at the time of answering and (*b*) that their capital resources would be expanded to correspond with the optimum enrollment desired.

The extent and speed with which they plan to expand varies with the type of institution, but under *a*, with presently foreseeable resources, the colleges as a group expect to expand their enrollments 20 percent by 1960, 34 percent by 1965, and 45 percent by 1970. Under hypothesis *b*, assuming that funds will become available to accord with institutional policies, these same schools are prepared to expand their enrollments 34 percent by 1960, 59 percent by 1965,

and 82 percent by 1970. The breakdown for fifteen Tennessee colleges included in this survey closely parallels the national averages.

These figures raise several interesting questions. Should private institutions receive tax supplements if gifts are insufficient for them to render maximum service? Assuming that some qualified students will need financial help, wouldn't state grants similar to GI assistance solve their problem and utilize existing facilities in the independent and church-related colleges at a saving to the taxpayers over undue expansion in state institutions?

Should additional junior colleges, community colleges, and universities be established at public expense? Should all or most of the expansion take place in existing state colleges and universities? Should students or their parents pay a larger share of the actual cost of operating public institutions? Is there inherent merit in a "dual system" of higher education? Is it necessary or desirable that all or most high school graduates go to college, and, if so, what about the high cost and blight of attrition with less than one freshman out of three in the South ever qualifying for a degree?

But let us take a close look at Tennessee. Thirty-three out of the thirty-seven independent and church-related colleges of the state answered my recent questionnaire (see Table 1). The answers reveal that these thirty-three institutions have enrolled at this time 18,239 full-time students, that they could take a maximum enrollment of 24,280 with existing facilities, that they anticipate an enrollment of 25,860 based on expansion plans for which funds are in hand or definitely assured, and that they would like to enroll 30,925 students if funds and faculty could be obtained.

In other words, these thirty-three private colleges and universities have space at this time for an additional 6,041 students, an increase of 33 percent over their present enrollment. They now have funds in hand or assured and plans under way which will care for an anticipated additional enrollment of 7,621, an increase of 42 percent. These same schools would like to increase their enrollments by 12,686 students, or 69 percent, within the next decade.

When these figures are considered along with the state's population growth, the number of qualified high school graduates (and I emphasize qualified), the plans of state institutions to expand, and the number of Tennesseans attending college out of the state, it appears that opportunities for higher education will not be seriously restricted in this state. Increasing demands for educated and trained men and women will make all citizens aware of the importance of their colleges and universities and more willing to support them. The need for more selectivity should, in the long run, improve the colleges and high schools of the state and assure better graduates with less human and financial loss.

Higher education is moving into a new era. The problem will not be the same or of equal intensity for all. Pressures for the expansion of state institutions will be great, and they must expand. I am of the opinion, however, that this growth should be shared with the thirty-seven existing private colleges and universities, in the interest of economy and a better-balanced program of higher education for Tennessee. This new era will present difficulties, but when have we been without them? A glance at the history of higher education in Tennessee from the days of the Reverend Samuel Doak should offer encouragement when the problems appear greater than the opportunities.

Both public and private institutions need additional funds for their present total enrollment of approximately 43,000

TABLE 1: ENROLLMENT SURVEY OF 33 INDEPENDENT AND CHURCH-RELATED COLLEGES AND UNIVERSITIES IN TENNESSEE, APRIL 1957

Name of Institution	Present Full-Time Enrollment	Maximum Enrollment with Existing Facilities	Anticipated Enrollment with Expansion Funds Assured	Enrollment Desired When Funds Are Available
Belmont	345	1,000	1,000	1,000
Bethel	450	500	650	1,000
Bryan	250	275	350	600
Carson-Newman	1,186	1,300	1,500	1,500
Chattanooga	900	1,200	1,500	1,800
Christian Brothers	400	650	650	650
Cumberland	118	525	525	525
David Lipscomb	948	1,400	1,400	1,400
Fisk	776	800	850	1,200
Freed-Hardeman	376	425	475	500
George Peabody	1,000	2,000	2,000	2,500
King	260	265	350	600
Knoxville	416	500	600	700
Lambuth	365	450	450	700
Lane	378	500	500	800
Lee	371	1,200	1,200	1,200
LeMoyne	382	450	500	600
Lincoln Memorial	525	525	650	800
Madison	300	350	350	500
Martin	175	350	350	450
Maryville	754	800	800	800
Milligan	350	425	450	600
Morristown	100	500	500	500
Scarritt	175	200	225	300
Siena	100	200	200	400
Southern Missionary	500	500	700	800
Southwestern	575	625	625	900
Tennessee Wesleyan	511	600	650	750
Trevecca	344	390	450	800
Tusculum	320	375	400	500
Union	499	600	600	800
University of the South	590	640	660	750
Vanderbilt	3,500	3,750	3,750	4,000
Total	18,239	24,280	25,860	30,925
Percentage of increase		*33%*	*42%*	*69%*

students. If this is to increase, and it surely will, greater sums in gifts and taxes are absolutely essential. It must be remembered always, however, that money is no substitute for vision, quality, hard work, and economy of operation. The job can, must, and will be done. In doing it, let all of us remember:

1. The future greatness of the state lies in the education of its youth.

2. The children are here, more are coming, and their education cannot wait.

3. The welfare of the students takes precedence over institutions, teachers and administrators, curricula, and educational machinery.

4. Students in public and private colleges and universities should not be subsidized at the expense of the faculty and staff.

5. The state needs all honest, quality institutions, both public and private, and can ill afford unnecessary and costly duplication of effort.

6. Ways and means must be found for the colleges and secondary schools to coordinate their programs more effectively.

7. The admission standards of colleges and universities in the state should be increased slowly so that only those who are qualified will go to college, thereby lessening the tremendous loss through dropouts and failures.

8. Public and private colleges, perhaps through the Tennessee College Association, should engage in more joint planning and cooperative effort.

9. The state and private agencies should give serious consideration to the need for vocational schools, technical institutes, junior colleges, and programs of specialized and adult education.

10. Tennessee is what she is because of her schools, colleges, and universities. These must be fostered with generosity and imagination to the end that the Volunteer State and the nation may ever go forward in greater service to God and mankind.

Adults are not alone managers of the present, but trustees of tomorrow. Thousands are on the march to the campus of the future. We must prepare for them. Even for those who do not attend, the college opportunity must be available, so that the decision not to attend is a free choice, not one of economic selection or limited alternatives. Whether or not the child of today takes advantage of the opportunity of tomorrow, the existence of that opportunity is a major influence upon his own life, his attitudes, his hopes, his aspirations. It is a symbol of the public concern for the welfare of the individual. It is an index to the hope that he, too, may learn how to grow and to develop and prepare for any task for which he is capable. . . .

Certainly, considering the central place of higher education in the health, prosperity, and security of the nation, now is not the time to alter our goals simply because we have more people to serve. Higher education enrollments have doubled three times in the last fifty years, and we can make provision for their doubling again if there is popular conviction as to its importance and imagination enough in method and adaptation. Doubt as to an expanding role for education in the presence of an expanding America is a retreat from a position of confidence in the essence of democracy itself.—From "Higher Education and the American Public" by David D. Henry in *Higher Education and the Society It Serves*, edited by Raymond F. Howes, published by the American Council on Education, 1957.

What Is a Nonaccredited College?

ALFRED T. HILL

WHAT is a nonaccredited college? To those familiar with educational accreditation or to those acquainted with nonaccredited colleges this may seem like a naïve question. However, those who truly know are an extremely limited group.

Within the last year have appeared such articles as "Accrediting—What Is It?" [1] "The National Commission on Accrediting: Its Next Mission," [2] and "Some Questions for Small Colleges." [3] The U.S. Office of Education is preparing a book on accreditation of higher education institutions and programs.[4] On June 25–26, 1957, the National Commission on Accrediting conducted a two-day workshop conference on accrediting in Washington, D. C. All of this is evidence that even professional educators are not too well informed on this important subject and that they are deeply concerned over it.

If there is confusion among the professionals, there is even more confusion in the minds of foundation and corporation executives and still more confusion on the part of school superintendents, principals, guidance officers, parents, and prospective students. However, this article cannot be all things to all people. Therefore, it is addressed to the interests of readers with a considerable understanding of the subject.

The word accreditation in a technical sense should not be confused with such words as approval, certification, recognition, acceptance, membership, and similar terms of endorsement in a nontechnical sense. It has even been said that accreditation should always be preceded by an adjective such as regional, national, state, partial, conditional, or what have you, in order to designate the degree or nature of recognition involved. At any rate this article has to do with one specific aspect of a broad and complicated problem, namely, the nature of those colleges which have not yet attained membership in one of the six regional associations of the country—the "regionally nonaccredited" colleges, and especially the fifty-two members of the recently formed Council for the Advancement of Small Colleges.[5]

When one considers the group as a whole, the obvious first impression is of the range, scope, and variety of these institutions. Because these words have been so effectively set before the public, a good way to classify the CASC members is under the four headings of the *First Interim Report* of the President's Committee on Education Beyond the High School: quantity, quality, variety, and accessibility.

Quantity.—Within one year after its establishment in the spring of 1956, CASC numbered fifty-two members. This is roughly one-half of the regionally nonaccredited colleges in the country. The total enrollment of these fifty-two institutions for the academic year 1956–57 was 25,115 students; two had 2,000 or more; six had fewer than 100;

[1] William K. Selden, *Bulletin* of the American Association of University Professors, Winter 1956.

[2] William K. Selden, *The Educational Record*, April 1957.

[3] A. V. Wilker, *College and University Business*, January 1957.

[4] To be published by Government Printing Office early 1958.

[5] The total current membership is 61 colleges in 31 states. However, the nine new members admitted in the spring of 1957 joined too late to be included in this study.

the median was 295. The total value reported in plant and endowment was $60,901,292. During the fiscal year ending June 30, 1956, the individual member colleges raised $5.8 million, and during the fiscal year ending June 30, 1957, CASC raised $150,000 for council projects and operations.

Quality.—Although quality is far less susceptible to accurate measurement than quantity, at least some idea of the nature of these colleges can be gathered from the fact that membership in CASC implies that the institution has attained the status of a four-year, degree-granting, private college of arts and sciences. It also implies that the school has the approval of its state board of education or state university, or acceptance of credits by at least three regionally accredited institutions of higher education. Perhaps the most important qualification is that a member must be "a college officially committed to and presenting evidence of an active program for early acceptance into the regional association."

The whole program of the council has been geared to the aim of advancing quality education. The Fund for the Advancement of Education has given the greatest support to this program by its grant of $71,000 to underwrite a student-testing program conducted in part by the Educational Testing Service and in part by the Psychological Corporation. The preliminary reports on the results of the Graduate Record Examinations administered to the sophomores and seniors in all fifty-two CASC colleges in the spring of 1957 are encouraging. If a student, like a product, is to be judged by his performance—not by the appearance of the "factory"—then the testing program may throw a little light into some of the darker corners of accreditation.

Variety.—CASC members exhibit a cross section of private higher education in America. Twenty-two are Protestant, twelve Catholic, ten non-church-affiliated, and eight interdenominational. Of these, three are Negro colleges, forty-five are coeducational, five are for women only, and two are for men only. Every decade since the 1840's has seen the birth of at least one member. The oldest is Olivet in Michigan—113 years; the youngest is Saint Mary of the Plains in Kansas—five years. Some of these colleges are small, entirely residential, but with a distribution of students from all over the country; some are larger with only day or night students in attendance. Some are devoted completely to a liberal arts curriculum; others include a strong emphasis on a specialty such as business, education, engineering, or religion.

Accessibility.—CASC members may be found in twenty-seven states from Maine to California. There are twelve in New England, three in the Middle Atlantic states, twenty-six in the Midwest, seven in the South, and four on the West Coast. Some are hidden in the mountains of Vermont and Kentucky; others front on the streets of Brooklyn and Detroit. They are accessible not only geographically but financially as well. The median cost to the student for board, room, tuition, and fees approximates $840 per year.

Leadership

A point to be considered in any group is the nature of its leadership. The fifty-two presidents of CASC colleges range in age from 63 to 29, with seven in their sixties, eighteen in their fifties, twenty-five in their forties, one 35, and one 29. The median age is 49. In the ten oldest colleges—all founded well before the turn of the century—the average presidential age is 50.7 years. In the ten youngest colleges—all founded since 1940—the average presidential age is 44.

Earned degrees in the presidential group include twenty doctor's degrees, twenty-one master's, and eleven bache-

lor's degrees. Interestingly enough there appears to be an increase in professional training in the younger group. Among the presidents of the ten oldest colleges there are three doctor's, four master's, and three bachelor's degrees. Among the presidents of the ten youngest colleges there are six doctor's, four master's, and none with only a bachelor's degree.

The membership would appear to be well balanced with age and practical experience on the one hand and youth and professional training on the other.

Operations

Another way to consider a group is in terms of its operating figures. As a whole, these colleges report a total capital investment in endowment and plant assets of nearly $61 million and a total operating cost of just over $14 million. Thus it is obvious that an operational budget equal to about one quarter of the total capitalization might be considered characteristic. Since their total enrollment is 25,115, it is clear that they have an investment of about $2,420 per student compared with an average in all liberal arts colleges of $5,467 in 1954.

The college income pattern is as follows:

Student income	52.9 percent
Gifts	31.8 percent
Miscellaneous	12.6 percent
Endowment	2.7 percent
Total	100.0 percent

If these colleges operate on a limited investment, it is equally true that they provide education at a bargain rate. In three-fourths of them, tuition and other fees range between $300 and $600 per year with a median of $400. By comparision, the median tuition charge in forty-six state universities for out-of-state students is $412.[6] According to a recent study by the Office of Education, the total expenditure per year for full-time undergraduate students attending public colleges is about $1,500. Since the median in CASC colleges for board, room, tuition, and fees is $850, this would leave a balance of $650 for the CASC students to spend on such things as clothes, books, travel, and recreation before reaching the average for students in tax-supported colleges.

[6] *New York Times*, March 24, 1957.

Break-even point

For the sake of analysis in the following paragraphs, all the nonresidential colleges, all those with fewer than 100 students, and all with over 2,000 students have been eliminated. This leaves a group of forty colleges which in terms of number of students, geographic distribution, and type of control may be considered to be a nucleus typical of the group as a whole.

At this point there arises a marked difference. Exactly twenty of these colleges operate in the red and twenty in the black. [*This is not an auditor's figure and the word* red *is used to designate those in which the operating cost per student is greater than the income (tuition, fees, board, and room) per student;* black, *when the operating cost is less than the income.*]

Analysis reveals that the "red" colleges have an average enrollment of 302 students compared with an enrollment of 371 students in the "black" colleges. This would indicate the conclusion that 300 is about the break-even point and that below this figure the chances of balancing expense against income on a per capita basis become increasingly slim.

It is encouraging to note that the colleges in the red estimate that they can double their enrollment by 1970. Since the indications are that enrollments will increase in all colleges in the next decade, there seems to be a good prospect that these institutions will soon switch from red to black.

However, there is another interesting factor in the problem. The colleges in the black not only lead those in the red by some seventy students, but they also average about $20 more in total student charges ($849 compared with $830). If half of these forty colleges can balance their budgets by such a slight margin as some seventy students at about $20 more each, it would seem very clear that those below the break-even point could balance in short order if they were to campaign aggressively for more students and raise their charges slightly at the same time. It looks as though the traffic could bear this move without any strain.

If 300 is the break-even point for students, then it is interesting to discover that $1,000 per student is about the break-even point financially. In other words, those colleges which can get their operating costs down to $1,000 and under per student and their income up to $1,000 per student are far more likely to balance than those which cannot. In the year studied, those operating in the red showed an average loss of $263 per student, while those in the black showed an average gain of $272 per student.

The figures reveal another interesting feature of the red group and the black group. Those in the red group with the smaller number of students and the lower charges are operating in plants of considerably greater value than those in the black group. There are thirteen in the red with plants reported as worth $1,000,000 or more compared with nine in the black; the average difference is about $165,000. In other words, the least successful colleges are operating in the most expensive plants. Why should the most expensive plants accommodate fewer students at lower fees? Here is a question for those involved to consider.

Furthermore, which group receives the larger amount in capital gifts? The red! Last year those in the red received nearly $300,000 more in capital gifts than those in the black. Those who are receiving the more money—even though it is in their capital accounts rather than their operating accounts—might do well to examine their programs to see if they could shoulder more of the student load.

Philanthropic support

Considering the picture outlined thus far, it comes as something of a surprise to learn that for the fiscal year ending June 30, 1956, the fifty-two colleges under consideration reported a total of $5,798,115 in gifts. This was an average of $110,000 per college. Twenty reported more than $100,000. These gifts came from six sources reflected in Table 1. This is what the colleges raised individually before they were organized as a group for any concerted effort towards a financial goal.

It would seem reasonable to conclude that a group of small colleges able to

TABLE 1: SOURCE AND AMOUNT OF GIFTS TO NONACCREDITED COLLEGES, FISCAL YEAR 1955–56

Sources of Gifts	*No. of Colleges*	*Amounts*	*Percent of Total Gifts*
Bequests and Other	45	$2,428,129	42.0
Religious Bodies	29	1,272,291	21.9
Parents and Friends	36	951,799	16.4
Corporations	28	529,456	9.1
Foundations	26	336,830	5.8
Alumni	39	279,610	4.8
Total		$5,798,115	100.0

average more than $100,000 each from these six sources are financially here to stay.

The first observation on this support picture is that there is a substantial amount of overlapping. Sixteen colleges receiving support from corporations also received support from foundations. Eight received gifts from all six sources. There is a general impression that Catholic colleges all receive strong financial support from the church. However, nine of the twelve Catholic members of CASC report no church support except the "contributed services" of their faculties.

One aspect of college support that has attracted the attention recently of foundations and corporations has been the area of alumni contributions. The theory is that if the alumni are loyal, a college must be good, but if a college cannot attract the support of its own "family" there must be something wrong. In the case of the CASC colleges, thirty-nine of the fifty-two reported a total of $279,610 for the fiscal year 1956. This is an average of $7,150 for the thirty-nine.

The details of alumni support of CASC colleges have been reported in the April 1957 issue of the American Alumni Council *News*. In this article fifteen members were selected because they submitted reports to the American Alumni Council for inclusion in the council's annual survey. These colleges represent a fair nucleus of the group for the purposes of the present consideration. Only one of the fifteen, with an average alumni gift of $41.61, exceeded the national average for comparable colleges. However, ten of the fifteen exceeded the national average in loyalty—percentage of effectiveness of solicitation (17.4 percent). In considering the total picture it should be remembered that many of these colleges are very small, very young, and church-related—all of which implies distinct financial limitations on alumni support. The general conclusion is, "Not much money, but a lot of loyalty."

Financial support needed for accreditation

In the spring of 1957 the United States Steel Foundation, Inc., under the heading "Nonregionally accredited liberal arts colleges" announced a grant of $100,000 "to a number of colleges not yet fully accredited, but seeking to provide greater community service." Of this sum, two grants of $25,000 each have already been allocated. One additional grant of $10,000 was awarded to CASC. There remains as of this writing one grant of $25,000 still to be awarded by the decision of "a jury of educators selected by the Association of American Colleges and its affiliated Commission on Colleges and Industry."

CASC has polled its fifty-two members with this request: "Please submit an essay on 'How My College Could Use $25,000.'" Forty-seven replies have been received. It is one thing to indulge in wishful thinking—"If wishes were horses, then beggars could ride." It is quite another thing to spell out in detail how you would spend $25,000 when you know that you are in competition with many other colleges for the same grant. Following are the items which were most frequently mentioned:

Items Needed	*Times Mentioned*
Library (building, books, services)	28
Faculty (salaries, graduate study, workshops)	27
Other buildings (dormitories, classrooms, gymnasiums)	14
Science laboratories (supplies and equipment)	13
Consultant services (mostly for accreditation)	6
Debt reduction or current deficit	3
Public relations, alumni relations, fund-raising	3
Endowment	2
Operations (admissions office, management survey)	2
Scholarships	1

Repeatedly, presidents used phrases such as these:

"Our only remaining obstacle to regional accreditation is our low faculty salary scale."

"We have been told that with financial stability, accreditation is assured."

"Our library is our greatest need in our program towards accreditation."

The question has often been asked: How much money would be needed to accredit all these colleges at once? This is not a simple question to answer because there are so many local variations, because standards quite properly are being raised in many areas, and because at best the answer can be nothing more than the current estimate of the college administration. However, thirty-eight colleges have estimated that they need a total of $16,455,000 for development of their physical facilities—a nonrecurring capital investment—an average of about $430,000 per college. Forty-two have said they need $1,280,000 in their annual operating budget for increases in faculty salaries—an average of about $30,000 per college. Thirty-two have stated that they needed a total of $997,500 for increased annual operating costs, or about $30,000 each. These three mixed items added together amount to $18,732,500. Let's be generous and say that $20 million mostly in capital funds, but partially in operating funds, would do the whole job. This is to meet the requirements of accreditation only. It would take three or four times this much to develop these institutions to what they estimate as their own maximum potential—say $80 million. If these colleges were allowed to die, it would cost three or four times as much again to replace them.

But the story is still not quite told. These colleges could, for the most part, double and in many cases triple their enrollments in five or ten years at relatively little cost in additional plant and staff, thus multiplying the effectiveness of their service many times, and at the same time improving their own programs. This is why they are worth serious consideration by foundations, corporations, professional educators, and regional accrediting associations. They represent an untapped resource—a potentiality for meeting a national problem both qualitatively and quantitatively.

Three-year development program

In order to pull themselves up by their own bootstraps, the CASC colleges have launched a three-year program to raise over $3,000,000. It is their ambition to raise a million dollars a year, the primary purpose of which is to improve faculty salaries—their worst obstacle to regional accreditation. Other projects include a joint academic and management survey to be sure their "house is in order" and various smaller undertakings in such fields as public relations, research, workshops, and curriculum development. This program has recently received the endorsement of former President Herbert Hoover, who wrote as follows in a letter to Dr. K. Duane Hurley, president of CASC:

> **I have long been convinced that the failure of our great foundations to develop and support adequately the some fifty-odd small nonaccredited colleges is the greatest gap in their otherwise great contributions to American education. . . . To put these small colleges on their feet would probably cost less than $75,000,000, which is not 10 percent of the annual gifts to our larger institutions.**

Encouragement of this sort has also been received from such well-known figures on the educational scene as Dr. Wilson Compton, recently retired president of the Council for Financial Aid to Education, Dr. Theodore A. Distler, executive director of the Association of American Colleges, Dr. Frank H. Sparks, chairman of the Commission on Colleges

and Industry, and many others. CASC has benefited by fine cooperation from the American Council on Education, the American Alumni Council, the National Education Association, the American College Public Relations Association, the U.S. Office of Education, the National Commission on Accrediting, and the regional associations. Financial support has come from the Union Carbide and Carbon Corporation, the U.S. Steel Corporation, Time Inc., the General Electric Company, the Shell Oil Company, the Socony Mobil Oil Company, and the Fund for the Advancement of Education.

This type of encouragement, support, and approval has nothing to do with accreditation in its technical sense. However, it increases the responsibility of CASC to the public for the qualifications of its own members and for their progress in the direction of accreditation and far beyond towards their goal of maximum self-development.

This seems like a long answer to the question: What is a nonaccredited college? However, it proves the point that it is not a simple question; and it gives at least some description of the nature of the colleges involved, the potential they represent, and the purposes and policies of the organization they have created in order to help themselves along the road of progress.

THE UNITED STATES faces an awesome responsibility in the conduct of its foreign policy. The maintenance of peace or, if war should come, then the winning of that war, is dependent in great measure upon how effectively the United States carries out its political, economic, military, technical, information, and cultural programs in countries all over the world, as well as on the policies it follows in dozens of international organizations and agencies. Peace or the successful waging of armed conflict does not hinge on government action alone. Each is contingent on the conduct of American business and the activities of other groups overseas. Each depends on the degree of understanding of international problems possessed by the electorate. This understanding, in turn, requires good teaching in schools at all levels, effective adult education programs, knowledgeable reporting and interpretation of events and trends by newspapers, magazines, radio, and television, and depends on the effectiveness of the activities of hundreds of private agencies interested in world affairs.

It is apparent that there exists a need for persons with a diversity of training, possessing a wide range of factual knowledge and many different skills in numerous occupations and endeavors. The requirements range from the generalist—the broadly and liberally educated man—on one hand, to the most narrowly trained subject-matter expert or technician on the other. Between these two extremes on the continuum of needs is the specialist in international relations.—From *Training of Specialists in International Relations* by C. Dale Fuller, published by the American Council on Education, 1957.

Myth and Mystery in the Cost of Schools

FREDERIC C. WOOD

THE PERCENTAGE of our tax dollar which is going into the building of new schools is so high that it hurts. It hurts badly and it is going to hurt more before it hurts less. The pain is severe —not only acute but apparently chronic. As with any acute pain it is difficult to be rational about it, to analyze it calmly. It hurts so much we scream, we stamp our feet, we sweat. In desperation we attribute the cause to anything or anybody (except perhaps to our own way of life). As with any severe pain, our imagination runs wild: Is this a sign of gallstones, appendicitis, ulcers, cancer—or it is just gas? Are we being duped by our educators and our architects either deliberately or in their blissful ignorance?

It is difficult for a layman to get a satisfying answer to his questions—his natural, logical, and legitimate questions. The primary reason for this is that the layman is looking for a simple answer. To him a school is a school; it holds so many kids. What is the cost per pupil? That *seems* fundamental. That *was* fundamental when most of *us* were in elementary school, for in my school, at least, there was no gymnasium, no auditorium, no cafeteria, no library, no health or remedial unit, no loud-speaker system. Today a few or many or none of these facilities may be in an elementary school and hence the cost per pupil for buildings structurally identical can vary tremendously and they will still be schools.

Automobiles can vary too, in size, weight, horsepower, and in a myriad of gadgets such as power brakes, steering, radios, heaters, and so on, but they are still automobiles and may carry the same number of people. Houses can vary similarly in their appointments and area and have the same number of occupants. A suit of clothes can vary in cloth, tailoring, buttons, lining, and so forth and, unless you get two pairs of pants, the number of occupants will be one.

The prime myth about the cost of schools is that there *is* any real mystery about it. The apparent mystery comes from trying to compare things that are not comparable—from trying to compare whole units instead of comparing their component parts.

In addition to the difference in facilities there are other major factors which determine the cost of a school.

1. *Size of each facility.* Classrooms (at least in Connecticut) will vary from 750 to 900 square feet per room; so may the size of cafeterias or gymnasiums or auditoriums vary.

2. *Arrangement of facilities.* This will determine the area of nonproductive space such as corridors and lobbies. Usable productive space can vary from 65 to 75 percent of the total. In an elementary school for 800 children this might mean a difference of 10 percent of 50,000 square feet, which in the total cost of the school would mean a difference of $100,000 (5,000 square feet at $20 per square foot). This would equal $125 per pupil. Economy in arrangement costs nothing but effort.

3. *Type of construction.* The structural system may vary according to whether the building is fireproof, semi-fireproof, or combustible, and according to the number of stories and whether it is slab on grade or supported slab.

4. *Type of mechanical equipment.* Mechanical equipment represents about

one-fourth of the total cost and includes such factors as:

a) Heating—steam, hot air, hot water, gas-fired, oil-fired;
b) Ventilation—the number of air changes per hour and whether this air is heated and, perhaps, cooled;
c) Electricity—intensity of light (foot-candles), type of lighting (fluorescent or incandescent), stage lighting, luminous ceilings, the amount of power supplied, type of emergency lighting;
d) Plumbing—the number of toilets and their location and whether or not there is hot water for hand-washing.

5. *Interior and exterior finishes.* These may include such variations as:

a) Plaster or painted block;
b) Face brick, common brick, stone, cement block;
c) Ceramic tile;
d) Acoustic tile;
e) Floors—asphalt tile, wood, plastic tile, terrazzo, stone;
f) Exposed structural members or hung ceilings;
g) Type of window glass.

6. *Special building features.* Examples are

a) Covered loading platforms or canopies;
b) Plastic bubbles in roofs or skylights.

To illustrate all this more simply, the following formula shows what determines the cost of a school.

Cost = facilities + area per facility + non-productive space + mechanical equipment + structural type + finish + special features.

This simple formula is a professional secret which I am handing out at no charge; the use of it is the basis on which I earn my living. You should be able to measure with it the degree of economy with which your town builds schools.

Perhaps you now think that if all these factors enter into the cost of a school, it is really a mysterious subject and what you need is a crystal ball. Perhaps you are convinced that school costs can never be compared, can never be understood. I believe, however, that I can provide a right way to come up with an analysis of school costs which eliminates the confusion, the mystery, and the name-calling.

There is a definite and positive technique for comparing the cost of schools. While it is not simple, it is not as complicated as comparing the costs of automobiles or boats or suits of clothes. It can be done by anyone who knows building costs—that is, the cost of the individual parts. It has been my experience that 90 percent or more of any cost differential between two schools can be accounted for as easily as you can balance a ledger. It is remarkable how you can reduce to a common denominator the costs of several school buildings and in the process identify and put a price tag on their differences. You can then look at each item objectively and without emotion and decide whether it is worth the cost or, perhaps what is more to the point, whether you can afford it.

The little red school was our educational facility when we lived in the little white frame house. Little by little and bit by bit we have increased the comforts, conveniences, and luxuries of education as we have those of living. In one place we may have gone further than in another. To compare them we must dissect them—take off these pieces one by one—identify them, price them, and evaluate them.

Table 1 is, in condensed form, a comparative study of two schools in Connecticut which were built in 1954. One can honestly be called an average-cost school whereas the other is a very low-cost school. There are three primary areas of difference: (1) facilities, (2)

TABLE 1: COMPARISON BETWEEN AN AVERAGE-COST SCHOOL AND A LOW-COST SCHOOL

COST OF BUILDING	COST PER PUPIL		COST PER SQUARE FOOT	
	School A (640 pupils)	School B (350 pupils)	School A (44,626 sq. ft.)	School B (17,548 sq. ft.)
Total cost	$1,035	$537	$14.85	$10.70
Premium paid for more facilities	290	.....	.65	.....
Cost minus above premium	$ 745	$537	$14.20	$10.70
Premium paid for lower upkeep	52	.....	.75	.....
Cost minus above premium	$ 693	$537	$13.45	$10.70
Premium paid for utility, convenience, appearance	134	.....	1.92	.....
Cost minus all premiums paid	$ 559	$537	$11.53	$10.70

upkeep, and (3) utility, convenience, and appearance. Table 1 shows the effect of these differences on the over-all cost.

It is understandable that the taxpayers in Town A demanded an explanation of this wide difference in cost. The cost per pupil of their school was double that of the other. The cost per square foot was 39 percent greater. (That in itself illustrates the lack of any real value in the careless use of those shop-worn units as measures of school costs.) Although there was a wide difference in the number of pupils, it was possible to explain the cost difference by the technique which follows.

School A had additional facilities not provided in School B, as shown in Table 2. This added to the cost per pupil in School A $\frac{\$185{,}460}{640}$ or $290 per pupil, and accounts for 65 cents in the cost per square foot.

TABLE 2: COST AND AREA OF ADDITIONAL FACILITIES PROVIDED IN SCHOOL A AND NOT IN SCHOOL B

Additional Facilities	Area (sq. ft.)	Estimated Cost
Multiteaching rooms	1,800	$ 28,400
Auditorium-gymnasium	5,220	100,000
Library	1,000	20,000
Larger classrooms	1,630	25,700
Principal's office	340	5,360
Remedial rooms	381	6,000
Total	10,370	$185,460

It is interesting to note that the adjustment for these major differences between the two schools (as it concerned facilities) made a great difference in cost per pupil but almost no difference in cost per square foot—again demonstrating the lack of reliability of these units.

But School A had some other items not in School B which, though higher in first cost, provided lower maintenance or upkeep. These are listed in Table 3.

The effects on the unit costs were:

(1) $\frac{\$33{,}500}{640 \text{ pupils}} = \$52$ per pupil;

(2) $\frac{\$33{,}500}{44{,}626 \text{ sq. ft.}} = \$0.75$ per sq. ft.

School A had other additional facilities which did not add to the area but added to the cost. These items, shown in Table 4, provided greater utility or convenience or better appearance.

The total cost of these items was

TABLE 3: FACILITIES INCLUDED IN SCHOOL A AND NOT IN SCHOOL B WHICH WERE HIGHER IN INITIAL COST BUT PROVIDED LOWER MAINTENANCE

Facility	School A	School B	Added Cost to School A
Roof deck	Composition (fireproof)	Wood (nonfireproof)	$11,000
Lighting	Fluorescent	Incandescent	12,000
Dishwasher	Included	None	2,000
Electric service	Underground	Overhead	5,000
Radiant perimeter heating	Included	None	3,500
Total			$33,500

$85,600 and they affected the unit costs as follows:

(1) $\frac{\$85,600}{640} = \$134$ per pupil;

(2) $\frac{\$85,600}{44,626} = \$1.92$ per sq. ft.

Some of the savings effected in School B were actually uneconomic such as:

1. *Lighting.* The use of incandescent lighting for classrooms cut down the original investment but increased operating costs. If incandescent light had been used in School A, the operating cost would have been $2,500 to $3,000 greater per year. (Thus the saving in operating cost in four years paid for the greater investment in fluorescent lighting.)

2. *Dishwashing.* Hand dishwashing in a school which accommodates 350 children is a false economy and is questionable from a sanitary point of view.

Generally, School B is a good school and the construction economy is good. It will not be overly expensive to maintain. It is lacking in facilities, and the staff is fully aware of the deficiencies. The use of a three-purpose room—cafeteria, playroom, and auditorium—is unworkable. Something has to give, for there are not enough school hours in the day.

TABLE 4: SCHOOL A COMPARED TO SCHOOL B WITH RESPECT TO CONVENIENCES WHICH DID NOT ADD TO AREA BUT DID ADD TO COST

Facility	School A	School B
Steel joists	Concealed	Exposed
Basketball baskets	Six	None
Unloading canopy	Included	None
Intercom	Included	None
Controlled clock system	Included	None
Wardrobes	Closed-ventilated	Open-hanging
Cubicles and storage facilities	Included	None
Book storage	Adequate	Limited
File and paper storage	Adequate	Limited
Toilet facilities	Adequate	Limited
Ventilation	Adequate	Limited
Fire extinguisher	Recessed	Face-mounted
Individual classroom exits	Included	None
Plastic roof bubbles	Included	None
Plastered walls	Included	None
Flood lighting	Included	None
Decorative lighting—entrance corridor	Included	None
Radiant heat in kindergarten floor	Included	None
Recessed display panels and cases	Included	None

The inadequacy of the wardrobes and other classroom storage facilities is the source of teacher complaint.

Of the other differences, I have my own personal opinions as to which were worth the prices paid for them. My opinion, however, is not important. Opinions would vary greatly among educators, boards of education, architects, engineers, and taxpayers. The important point—which I cannot emphasize too strongly—is that by this method of analysis the information is all out on the table. There is no mystery. It is available for public discussion.

By dissecting the problem, by analyzing the pain, the town knows what it is paying for. This is the way to explode the myths and mysteries with which the publicity seekers and politicians hunt and torment our boards of education, with which our educators or boards can hide the cost of their specific decisions and their responsibility for them, with which the less capable and less responsible architects and engineers can hide their extravagances and inefficiencies and even ignorance.

It is our failure to match schools piece by piece, item by item, that leads to the building up of all kinds of myths and generalities, that leads to ineffective, inconclusive, and unproductive public wrangling. This wrangling is discouraging many capable people from ever serving on a school board; it is *not* helping our educational system and it is *not* reducing the cost of school buildings. Here are a few popular myths:

1. Private and parochial schools are more economically built than public schools. Obviously, this is a generality and there are individual examples which will prove it or disprove it.

2. Two-story buildings are cheaper than one-story buildings. The reverse of this is generally true but the margin is so small that many factors may change it.

3. The high cost of a school is due to collusion between contractors. In rare cases this might be true; as an excuse it is used far too frequently.

4. Rising building costs are mainly responsible for the fact that the bids exceed the estimate. Building costs go up about 5 percent per year. On two recent jobs, a rise in cost over the estimate of 50 percent was explained away by the use of this crutch.

5. Having several buildings (the campus plan) is cheaper than having a single, condensed building. In this debate there is much misrepresentation. For equal facilities and equal quality of building, the campus plan cannot compete on a cost basis with a single building.

Every one of these myths can be answered by specific analysis, but unfortunately the myths are usually advanced by one who screams the loudest and who frequently prefers to avoid any facts which will silence his screams.

To an automobile manufacturer there is little mystery about the cost of a car; to a suit manufacturer there is little mystery about the cost of a suit; to a builder there is little mystery about the cost of a building—even a school building; to a layman the variation in the cost of all three is hard to understand. There are Cadillacs and Fords, there are Brooks Brothers suits and Robert Hall suits, there are schools costing $1,000 per pupil and $500 per pupil.

A school consists, however, of a number of component parts—functional parts, structural parts, mechanical parts, and architectural parts. These parts can be price-tagged and their values related to their costs. The mystery in school costs lies in the attempt to compare the costs of composite figures for products which are not comparable. If we want value for our school dollar, we must insist on knowing the cost of the parts and appraising them for their true worth and our ability to pay for them.

Asian Universities in Transition

ALGO D. HENDERSON

THE ASIAN universities, founded for one purpose, now have another and different job to do, and the transition is not being easily achieved.

Upon entering the campus of an Asian university, one is greeted with imposing buildings, spacious areas, and friendly hospitality. First impressions are of substantial plant and able academic leadership. Then one discovers that this is only part of the story.

The older of these Asian universities were established under British, German, or French influences. The Japanese, for example, following the Meiji restoration, found that the German curriculum for training specialists would serve their most urgent needs. In India, the British made a clear-cut decision. Education should serve the purpose of promoting Western culture: the universities should accomplish this purpose and prepare clerks for the subordinate levels of governmental service. Thailand, Burma, and Ceylon were also under this British influence, and Hong Kong still is.

Along with these patterns came several characteristics of higher education that have been basic in European tradition: (1) a policy of admitting students only in limited numbers; (2) a system of examinations to determine who should receive degrees and at what level of recognition; (3) a curriculum that emphasized classical and theoretical materials and ignored or segregated the applied arts and sciences; and (4) a method of teaching that set the professor up as the authority who lectured on his subject without participation by the students.

In Japan, the seven Imperial and ten national universities were highly centralized, with the Ministry of Education in charge. Doshisha, with its Amherst ties, Keiogijuku (commonly called Keio), which looked to Harvard for its inspiration, and Waseda became substantial private institutions; but because of the supervision of the Ministry and the prestige accorded the Imperial universities, their programs were colored by the philosophy that evolved in the Imperial universities.

In India, the plan had been more nearly that of the University of London; that is, each university was an affiliating institution for various colleges, with powers of examination and the granting of degrees. The colleges varied in type and in sponsorship and each had certain autonomy in operation. As examples, such colleges of arts and sciences as Pachaiyappa's (Hindu), Presidency (governmental), Loyola (Catholic), and Madras Christian (Protestant)—all of them constituent or affiliated colleges of the University of Madras—have heritages of which each is proud and programs with some individuality of character and of quality. Yet the over-all structure permitted the British influence and control to permeate the system. More recently the universities have added teaching programs of their own.

The British imprint on India, Ceylon, and Burma is deep and lasting. Professors are articulate and cultured. Efforts to replace English as the medium of instruction in India thus far have failed and the agitation to do so has diminished; in Ceylon, the debate is still raging. The aim of the student is still that of getting a prestige job—a position with the government. The term "clark" is permanently embedded in the vocabulary, and with socialist-minded governments rapidly extending the scope of their activities, the pressure to qualify as

a "government clark" becomes greater rather than less. Many of the professors one meets speak with nostalgia of Oxford, although others have become convinced that the American pattern of education is what is now needed.

The policies of limited enrollments and restricted curricula, as well as the British colonial policy with both its strengths and its weaknesses, can be seen in perspective by examining the situation in Hong Kong today. The British university in this colony of two and a half million people is the University of Hong Kong. In the scope of its services, it has the best financing, the most adequate facilities, and possibly the ablest faculty of any university in the East. I suspect that the quality of its academic work is very good. Its enrollment, however, is only 800, and of these, 40 percent are in the medical school. One hears among the Chinese charges that admission quotas favoring selected families are used by the university. Though Hong Kong is one of the greatest commercial, banking, and insurance centers in the Orient, the university provides only one professor for this broad area of knowledge. Hong Kong is pitifully short of schools for children; yet the university limits its enrollment in professional education to a mere handful, and on the graduate basis.

To fill the void would not be too difficult. Hong Kong has dozens of Chinese scholars who have left positions of prestige and distinction in China to seek refuge in a free city. Because education is their profession and in order to earn a pittance, many of these scholars have banded together into refugee colleges. With financial encouragement from Yale-in-China, the New Asia College now has a handsome building and active program. With similar support from the Asia Foundation, the United College of Hong Kong has recently consolidated five of the refugee colleges and is functioning with both day and evening courses, many of them in fields not offered by the university.

Under the legislation in Hong Kong only the University of Hong Kong has degree-granting powers and thus far it has refused to recognize any of the newer institutions for this purpose. This is done in the name of "protecting standards," and almost certainly the standards of the new institutions are lower than those of the university—they have so little money for equipment, books, and salaries. However, after visiting plants and observing several faculties in operation, I think that the policy of nonrecognition is a shortsighted one. It makes an interesting sidelight to note that the National Taiwan University, a non-British institution, has come to the rescue by offering degrees to some of these students.

The examination system prevails throughout the East, and the direct relationship of college education and examinations to civil service has operated to deepen its roots. The examination supposedly provides a standard measure of achievement. Granting this assumption, the entrance to civil service is "democratic." Since the results of the examinations are graded into classes and Class I graduates get the preference for specific jobs, the presumption is that merit wins. All this reasoning is logical, of course, and there is general faith in the validity of the examination as a single measure of achievement. What happens, naturally, is that textbooks are correlated with the examinations, professors lecture to secure a high percentage of passes, and students loaf during the term and "bug up" at the examination time. Some colleges give preliminary examinations to weed out those students whose performance is apt to reflect against the institution. Libraries become textbook libraries. The intellectual skill developed is that of recalling facts at the examination.

Students who fail to pass become labeled as failures, and those who get the lower marks go without jobs. India is attacking this problem by abolishing the requirement of a degree for a civil service job.

Entrance examinations also determine the fate of the candidate for admission to the universities and colleges. There is a justification for the practice because the preparation given by the secondary schools varies widely in type and quality. In India and Burma this preparation is seriously deficient, generally being no more than the equivalent of our tenth-grade work. The examination is also a means of maintaining the enrollment at a desired number. The universities do not have the money or faculties to permit the admission of unlimited numbers —and the appetite for learning is swelling in this part of the world just as in the United States. The University of Rangoon, for instance, admits each year only about 16 percent of some 34,000 examinees.

In Japan, the entrance examination has a further impact on the life of the student. Here the universities are pyramided in prestige. Everybody knows without question that Tokyo University is the top university and that Kyoto ranks second. The aim of the graduate, hardly without exception, is a job with big business centered in Tokyo or with the government. These employers extend first favor to the graduates of Tokyo, then to Kyoto, and next to Kyushu, and so on. Hence the urgency of getting admitted to the University of Tokyo is terrific, and rather than accept a lesser institution, men will try the Tokyo examinations year after year, all the while studying for the exams. Large private universities of uncertain standards feed upon this suspended and suspense-burdened student population, doing a financially profitable business, as do other coaching agencies, in preparing students for these examinations.

The bane of the university system in the East is the failure of the graduate to get a job. It is estimated in Japan that 25 percent are without jobs, and in India the rate must be as high. The Kotschnig theory that the frustrated intellectual will turn against society is partially substantiated here. Certainly the proportion of college men who turn to communism for its promise to cure the ills of society is large. The stock answer of the educators is to limit the numbers, as is done in Europe. But the dilemma persists because the demand for education persists, and the institutions, sometimes grudgingly, respond—as the enrollments in all the countries testify. For example, the average student-faculty ratio in Indian universities is now 35 to 1, more than twice that prevailing in the United States.

The situation is puzzling because one would suppose that these rapidly developing countries would need all the educated persons they could produce. Education does not increase the number of people to be employed; rather it should increase their individual productivity and broaden considerably the range of jobs for which each might qualify. Then what is the difficulty?

In searching for an answer, I visited Okayama University, one of the newer national universities in Japan. (During the postwar reform period, Japan launched a national university in each prefecture, and authorized many new public and private universities and junior colleges—too many, most of the Japanese now think.) The Okayama prefecture is interesting in many ways. It is one of the better agricultural regions and some experimentation is under way in using mechanized farming. Industry is diversified and includes both large-scale (for example, nylon) production and small enterprise. The principal cities appear to be prospering. A sub-

stantial expansion of the harbor is under way with a considerable enlargement of the area for factory sites. The improvement includes making an artificial lake which will be converted to fresh water and a recreation area. The medical school is a good one and the need for expanded health services is obvious. Museums of art, folk arts, and of commercial products add cultural interest and stimulation.

Okayama has a progressive government, much interested in improving the efficacy of government. Here, then, is a province that would seem to have job potentials for educated people of many types. And the opportunity should be wide open for young people to make cultural and civic contributions and to build desirable home and community lives. Yet the graduates of Okayama University have their eyes on jobs in Tokyo, and the professors, in desperation to help, make trips to Tokyo to recruit such jobs. Something clearly is out of focus!

In India, I have asked many groups this question: With the obvious need everywhere for advances in health, education, and economic well-being, and considering the ambitious five-year plans for social, economic, and community development, why does anyone who possesses knowledge and skills need to sit idle? The answer constantly surprises me—surprises me because of the bland assumption on the part of all Indians that America is materialistic whereas *they* are concerned with matters cultural and spiritual. The answer is that the student must have a job that gives him an appropriate living and position in life. When I suggest that one thing India needs is plows, and that a simple plow can be made by intelligent men working in a shed to start with; or that the literacy rate being 29 percent for men and 8 percent for women, there must be a need for teachers—who would sit under a tree as a classroom if need be; or that the red tape that is so prevalent needs the skilled trimming that young men trained in administration could give it, I am told that the student cannot take a job that doesn't exist. In fairness, I must note that the statistics quoted on pay rates for jobs such as teaching are decidedly low.

When pinned down, the Indian and Japanese educators state that it is the arts students who become the unemployed. Actually, there is a shortage of qualified people in the various technical fields. This, again, reveals a weakness in the European-inherited system. The universities have perpetuated the dichotomy between arts and science and between theory and practice by segregating the curricula. The faculty of arts teaches history, literature, and philosophy; the faculty of science teaches science; the social sciences and the technologies have been left out, or left to find their places in separate schools that are regarded as subgrade. Students do not get a balanced education and those in the arts are educated with neither orientation nor preparation for jobs. The consequences of this are plainly apparent.

Another weakness of the Eastern university, from the American point of view, is the near exclusive use of the lecture system in teaching. In both India and Japan the lecture system is generally used without any follow-through with the student such as is provided in England by the tutorial plan or in the United States by discussion sections. Thus, the advantage of the lecture technique is not fully achieved and the faults are exaggerated. Intercommunication between teacher and student is a cardinal principle of learning, but in the East there is little of this. The professor lives in a world of his own specialty. The students do their discussing of the problems of the

world in "bull sessions" with their cronies or in the coffee house where the Communists hold forth. This is most serious in India and Burma where the students have entered the university at the age of sixteen with a poorly grounded secondary foundation. They have been sheltered at home, are immature and gullible, and thus ripe for the venturesome life of student politics.

Student government, as we know it, does not exist in these countries. Administrative officers do not trust the students and will not repose responsibilities in them, and so there is little opportunity for the students, under guidance, to learn to carry responsibility.

It is not only in the case of the students that the blind lead the blind. The teachers function within a highly departmentalized hierarchy where the head of the department sits on a pedestal. This department head has come to his position after years of patient waiting, diplomatic maneuvering, and skillful acquiescence with the views of his predecessor. Finally he, too, is in a position to lord it over his subordinates. The extreme of this sequence is found in Japan where every field of knowledge or activity, from archaeology to wrestling, is divided into schools of thought. Within a department the lowly instructor or assistant professor, to hope for advancement, must subscribe to the school of thought of his superior. Knowledge becomes dogmatism and dogmatism may as easily perpetuate error as truth.

This pattern of specialization and departmentalization leaves no room for general education. True, in Japan the reforms introduced during the American administration following World War II called for a four-year college course of which the equivalent of one and one-half years should be devoted to general education (to which students are admitted after twelve years of schooling). And this has been the recent pattern of the curriculum, but with indifferent success. What usually has happened has been that the teachers in the former university preparatory schools were brought into the universities, and these faculties, working in their former plants, were assigned the job of general education. The university faculties, looking askance at the new development and their new colleagues, continued with their specialties as before on the university campus. But with this difference: Now they were supposed to prepare the specialists in two and one-half years instead of three, and many of them felt strongly that this cannot be done.

I do not mean that there have not been adherents for the reform plan or sincere efforts to make it succeed. If the President of Tokyo University had not lent his leadership and prestige to the general education movement, it might earlier have collapsed. Perhaps it will yet succeed, but as of now it remains an essentially American graft onto a basically German system.

Officially, India is in favor of general education. The report of the University Education Commission, 1949, gave substantial attention to the subject. A committee of prominent educators visited the United States in 1956 to study our program of general education, and twenty-four Indian university professors spent five and a half months in the United States during 1957 in preparation for teaching such courses.[1] The chairman of the Indian University Grants Commission has recently stated that the introduction of general education as an element complementing the specialized curricula is an essential step for the near future. This interest and these views stem from the genuine commitments of the gov-

[1] The General Education Project also includes provision for nine American professors to spend approximately four months working largely in the same Indian universities in which the members of the Indian teams are employed.

ernmental leaders to democratic ideals and practices. They seem to see clearly the connection between education for good living in the good society and education for achieving the goals of a democratic nation. In this respect India differs from Japan because in India the underlying philosophy is being evolved by the leaders in public life, whereas in Japan a conservative-minded government is consciously permitting a retrogression from the democratic reforms of the American period to take place.

Given the will to introduce a program, one would suppose that the government and the institutions of a new and unfettered political unit such as India could easily proceed to do it. One would suppose further that the universities of India, following in the British tradition, would find general (cultural) education distinctly congenial. And some individual colleges do, having a balanced curriculum of arts and sciences and requiring students to take a distribution of courses. But as the registrar of one of the older universities, himself a firm advocate of general education, put it, there are many obstacles and difficulties. He mentioned the prevailing division of the faculties into narrowly conceived subject areas, each college having considerable voice in protecting its vested area; the tradition of teaching by lecture, whereas general education requires much use of discussion; the unavailability of graduate assistants and the lack of financial provision for them; the inadequacy of the libraries; and the absence of suitable teaching materials.

I would add to this list the difficulty that the Indians experience in making up their group mind. The habit of protecting self-interest is much more deeply ingrained than I had assumed; the maze of procedures for checking and countercheckings all proposals and actions is astonishing to any American; and the tendency in group meetings for everyone to want to decide everything is quite inhibiting on progress.

In essence, India is lacking in cultural unity and in over-all loyalties, especially in domestic affairs. It is because of this that the integrating force of general education is so badly needed, and it is because of it that the achievement will be so difficult.

The one action that is being taken seems hardly the right one to achieve the purposes of general education. Following the Delhi pattern, Indian universities are moving to establish a one-year and a three-year stratification within the curriculum. Presumably the one-year course has as its objective the better preparation of the students for college-level work, and there is some point to this. But some professors clearly state that the one-year program is to be the general education. This is precisely what the academic specialists in Japan want to achieve—to leave three solid years for the specialized study. This concept of general education as the substratum for specialized study, and a very limited one, does not at all fulfill the fundamental purpose of general education—to provide continuous cultural nourishment for a developing society.

The Asian universities, due to their structural pattern and their historical roots, find it easier to add specialized studies. This has had the advantage of making possible the creation of new colleges in the applied arts and sciences. In considerable part these new schools date from the end of World War II. The University of Delhi, for example, which previous to 1947 had faculties of arts, science, law, and medicine, since that date has organized faculties in education, agriculture and forestry, technology, and social science. In Japan, through the reforms of the American period, many former *semmon gakko* (vocational schools in agriculture, teacher training, and technical fields),

to which admission was gained from the middle schools, were incorporated into the new university pattern. The University of Kyoto, with possibly the most conservative-minded faculty in Japan, has added a school of education and erected a modest new building for it. These are but examples of a widespread movement.

The American influence in this direction has been strong, many, if not most, of the leaders in the change having been educated at American institutions. This is obvious in Thailand, for example. To parallel the more traditional program of the University of Chulalongkorn, the government is nursing two new institutions in Bangkok. One of these, the University of Thammasat, has as its principal function the training of persons for the public service. Operating primarily as a late afternoon and evening school, it has become a lusty infant with some 10,000 students, mostly part-time enrollees. The College of Education now has three campuses, the oldest of which has been in operation for nine years. In both cases young persons with doctor's degrees from such universities as Michigan and Ohio State appear to be giving the creative leadership. Indiana University has ICA contracts at both institutions.

As might be expected from the mushroom growth and previous failures to give attention to the applied areas, the new faculties and schools are not the equivalent of their American counterparts. The several countries are faced with a problem of crisis proportions which has several aspects. First, the urge to industrialize and to modernize is compelling. The desire to emulate the West is strong, and the propaganda that emanates from Soviet Russia and Red China about the strides being made there sets a competitive pace. Japan, of course, has been industrialized, but is feeling the pressure of technological advance (as evidenced by the fully automatic steel mill of the Kawasaki Iron Works), the need to improve her agriculture, and the requirements for personnel in administrative, social service, and teaching posts in order to implement her new-found democracy. Second, there is the coincident demand from college-age youth to attend college and to get desirable jobs upon graduation. The graduates with technical education do get jobs, and government and industry are hungry for more. And third, the poverty of resources is acute.

The governments, confronted within a short decade with the necessity of moving on every front at once, having inherited haphazard and inadequate tax systems based upon impoverished economies, being desirous of avoiding the ruthless measures used by the Communist countries to secure rapid industrialization, and being plagued with incompetent and often corrupt administrative staffs, have been unable to supply money or foreign-made equipment in the amounts needed. Plants, laboratory materials, and books are required beyond the ability to supply them. Teachers have been trained in an educational system that has kept theory and practice carefully segregated and they know too little of laboratory or field practices. Those who have taught in vocational schools (like the *semmon gakko*) badly need upgrading. In total, the teachers needed far exceed the supply. Under the circumstances the universities severely limit the number of students admitted to the technical fields. And, obviously, the training received by those admitted cannot be as complete as might be desired.

In thus describing the difficulties being encountered in the establishment of these new programs, I do not mean to imply a negative view. On the contrary, it seems to me that the need is apparent and the effort is highly commendable.

This is the view that has been taken by the several philanthropic and governmental agencies and by the many universities and enterprises of America that have been giving assistance. These new professional schools are essential for producing the men needed to implement the plans for economic and social development (the five-year plans of India, for example) so it seems probable that they too will undergo a period of steady development in resources and in the quality of their product.

Lest I leave too great an impression that Asian universities are all inferior in the quality of their work, I hasten to say that the older of the Japanese universities, probably a dozen or more of them, have well-qualified faculties, substantial library and museum collections, and much good equipment. They have ventured but little into rigorously directed graduate work, but as undergraduate institutions their work is of good standard. I have remarked upon the quality of Hong Kong. National Taiwan University, whose faculty includes refugee scholars, with plant, museums, and a library of several hundred thousand volumes, inherited from the days when it was a Japanese Imperial university, has certain strengths. Chulalongkorn has at least the advantage of requiring secondary training and age of admission somewhat comparable to ours. The University of Ceylon has an excellent plant and a good faculty, but is in danger of being seriously weakened by a determined effort of the government to require that instruction be in Sinhalese. In India the best academic work is probably being done at the Indian Institute of Science, not recognized for degree-granting purposes, but whose dissertations are generally accepted by the Indian universities in satisfaction for the doctor's degree.

Future trends in higher education will undoubtedly be affected by the work of agencies whose influence is not yet too clear. In India, the University Grants Commission, founded in 1952, with control over the distribution of subsidies from the central government, has a policy of noninterference, but nevertheless makes grants only to programs that it has recognized in advance and determines the types of programs that shall receive emphasis. The commission, with a competent executive staff, is becoming more and more the liaison between the government and the institutions.

In Japan a voluntary accrediting association is attempting to solve the problem of standards for recognition, a function formerly carried by the Ministry of Education. However, since the national universities are dependent upon the national government for funds and must deal through a Ministry that has been reluctant to relinquish power, it is not too difficult to speculate upon the ultimate source of recognition. In all the Asian countries, the ministries of education are powerful, and when the ministry has been captivated by the sentiment for nationalism, the character of the program in higher education is bound to change for better or for worse.

The new task before the universities of the East seems clear. The role distinctly relates to the fresh goals of the several peoples—to retrieve the riches of their cultures, some aspects of which have become tainted with ingrown social custom and prejudice; to sift the best wisdom from the experiences of East and West; to adapt for their own uses the best available means of raising their standards of living; to prepare their young people for occupations that will synthesize the earning of bread with the building of a new social order; and to prepare their youth to fulfill the responsibilities and to realize upon the opportunities in their newly oriented citizenship.

The Danforth Teacher Study Grant Program

PRESSLEY C. McCOY

HUNDREDS of faculty members throughout the country find themselves caught between the horns of a frustrating dilemma. Having completed their master's degree, and perhaps most of their requirements for a Ph.D., they now find it impossible to secure the financial means that would permit them to finish their work during a year's leave of absence. In all probability, they left graduate school with the intention of returning to complete their residence requirements after a year or two of college teaching. They may have dreamed of completing the thesis while teaching, but marriage, babies, committee assignments, or perhaps the death of a graduate adviser had not been considered in the planning of the time schedule. Letters from former classmates in industry, speaking in glowing terms of high salaries and tuition-free educational programs, only intensify the teachers' frustration. In addition, many of these instructors have probably been told by their college administrations that promotion and raise of salary are contingent on achieving the Ph.D. Caught up in this vicious cycle many instructors at this point in their careers answer the call of industry, while those who remain labor on hoping that some compromise in time and effort will enable them to complete their doctorate while teaching.

Millard E. Gladfelter, provost of Temple University, recently stated that "if new members of our faculties are not to lose precious years for themselves and their institutions, we must devise ways by which they can be helped in the completion of their graduate programs." It was to help alleviate this problem that the Danforth Foundation established its Teacher Study Grant Program. Since 1954, when this program was first established, 169 teachers have been provided with the means of devoting one full year toward the completion of their Ph.D. This fellowship, one of numerous programs offered by the Foundation, was formulated with the intention of raising the quality of teaching in our institutions of higher learning. From fifty to seventy grants are made each year to men and women, without bar of race or color, who give promise of becoming college teachers of unusual strength and competence, and who are prepared to engage upon a twelve-month program of graduate study.

The Danforth Foundation was established in 1927 by Mr. and Mrs. William H. Danforth of St. Louis. It was their hope that the Foundation would serve the needs of young men and women, particularly their educational needs, with special emphasis upon the cultural and spiritual aspects of education. Toward this end, the Foundation confines its activities very largely to the area of higher education with special attention to the recruiting and training of competent teachers in all fields.

Each year the Foundation invites all accredited colleges within the United States to nominate one or more teachers for these study grants. Institutions with a student body numbering up to 2,000 are invited to nominate one teacher; those with a student body numbering between 2,000 and 4,000 are invited to nominate two teachers; and universities with a student body numbering in excess of 4,000 are invited to make three nominations.

To be eligible, a teacher must be between the ages of twenty-five and forty, have had at least one year of successful graduate study, and have had at least three years of teaching experience (two of which must have been on the college level). Those receiving the grants are chosen on the basis of potential excellence as teachers, outstanding academic ability, personality congenial to the classroom, and integrity and character, including serious inquiry within the Judaeo-Christian tradition. Applicants with deep rootage in some non-Christian faith who are willing to participate actively in a predominantly Christian program are given equal consideration.

These appointments will allow the Danforth teacher one-half his salary for the academic year (usually nine and one-half months), plus one-sixth of his salary for each dependent listed in his latest tax return, up to a total of his full salary, or not exceeding $4,600. The minimum grant is $2,100. In addition, the Danforth teacher is given funds to cover tuition and official fees at the graduate school of his choice.

One of the unique features of this program is the Conference of Danforth Teachers and their wives (or husbands) held for one week in August at Camp Miniwanca, Michigan, prior to the year of graduate study. The purpose of this conference is to provide fellowship among those holding appointments as Danforth teachers and to focus attention on the problems of the Christian teacher and the methods of increasing his total effectiveness. Some of the lecturers in attendance have been Professor Perry Le Fevre, University of Chicago; Professor Clyde Holbrook, Oberlin College; Dean Ernest L. Colwell, Emory University; and Professor Paul Holmer, University of Minnesota.

The teachers selected since the beginning of the program have come from 138 different colleges and universities. Sixty-nine were on the faculties of state universities, while 100 were instructors in private and denominational colleges.

All major disciplines are well represented among the appointees, with the highest percentage of applications coming from the fields of English, music, art, sociology, history, and speech. The number of Danforth teachers selected from the various academic disciplines since the program was established are shown in the following tabulation:

Agriculture	4
Art	10
Biology	6
Business Administration	3
Economics	7
Education	6
Engineering	6
English	20
Geography	2
Geology	1
Home economics	3
History	10
Languages	5
Mathematics	7
Music	18
Philosophy	9
Physical education	3
Physics	6
Political science	6
Psychology	5
Religion	7
Social science	5
Sociology	10
Speech	10

Forty-nine different graduate schools have been chosen by the teachers for degree work. The greatest number, seventeen, have gone to Columbia, ten to Minnesota, eight each to Stanford and Harvard, seven to Chicago, and six each to Indiana University and Ohio State University. Five Danforth teachers have attended each of the following: Cornell University, University of Illinois, Princeton University, University of Michigan, State University of Iowa, University of California at Berkeley, and the University of Texas. Four selected the University of Southern California,

University of California at Los Angeles, University of North Carolina, University of Washington, and New York University. Thirty other major graduate centers were each chosen by three or fewer teachers.

The process of selecting those who will receive the grants each year from the several hundred applications is a rigorous one. Upon receipt of the nomination from the dean of each institution prior to October 15, the Foundation sends the full application blank to the teacher nominated. Following the application deadline on November 15, a reading committee consisting of college teachers, administrators, and the Foundation staff select approximately half of those applying for interview. At this stage each application is read by at least two different persons. The Advisory Council on the Danforth Teacher Study Grants (a group of educators who serve on a rotation basis) then chooses from fifty to seventy of those applicants who have been interviewed. The present members of the council are:

Dr. Dorothy V. N. Brooks, dean of women, Cornell University
Dr. E. C. Colwell, dean of the faculties, Emory University
Dr. Albert W. Dent, president, Dillard University
Dr. John R. Emens, president, Ball State Teachers College
Dr. L. D. Haskew, dean, College of Education, University of Texas
Dr. Philip H. Phenix, associate professor of education, Teachers College, Columbia University
Dr. Huston Smith, professor of philosophy and religion, Washington University
Dr. Clarence Stoughton, president, Wittenberg College

The Danforth Foundation is in a position to help a limited number of the most highly competent, dedicated teachers. How to meet the needs of hundreds of other deserving teachers is a problem which must be faced by our colleges and universities, whose student populations are already in excess of the available facilities. It is the Foundation's hope that by offering financial assistance and a "relationship of encouragement," an increasing number of teachers will become better prepared to awaken their students to that "vision of greatness" which Mr. Whitehead declared to be essential to true education. It is our hope that the Teacher Study Grant Program will prove to be a significant part of the Foundation's effort to strengthen the total dimension of American higher education.

Norms for Honorary Degrees in American Colleges and Universities

WALTER CROSBY EELLS

AN HONORARY degree from an American university or college at its best is a deserved recognition of distinguished public service or of outstanding creative work; at its worst, unfortunately, it has sometimes been given for thinly disguised commercial considerations, for publicity purposes, for the satisfaction of personal vanity, or as an easy means of securing free commencement speakers.

Early examples of the former type are the honorary degrees conferred on Benjamin Franklin in 1753 by both Harvard and Yale Universities and three years later by the College of William and Mary; on George Washington by Harvard University in 1776; and by the same institution in 1784 on the youthful Lafayette who at the age of twenty-seven is the youngest individual ever to be honored with an LL.D. by Harvard University.[1]

Numerous examples of the latter type had perhaps best not be resurrected. Mention may be made, however, of two early examples (it is hoped not typical) described by Charles F. Smith, professor of Greek at Vanderbilt University, in a paper presented at the annual meeting of the National Education Association in 1889.[2] One of these institutions, "now happily defunct" according to Professor Smith, conferred an honorary degree on a certain gentleman in consideration of his promise of a gift of $10,000 to the institution—a promise, however, that was never fulfilled. The other example is of an institution which conferred an honorary degree on the generous donor of a copy of Webster's unabridged dictionary, but which prudently waited until the gift to its embryo library was actually received before granting the degree.

As early as 1867, in a letter published in *The Nation* for August 1, Daniel C. Gilman, then a professor at Yale University and later first president of Johns Hopkins University, called attention to some of the evils connected with the wholesale bestowal of honorary degrees, asserting that "the mode in which honorary degrees are conferred in this country is a sham and a shame." Incidentally, after writing this letter, President Gilman himself was the recipient of no less than nine honorary LL.D. degrees, doubtless well deserved in the case of such an outstanding pioneer educator in the field of graduate education.

President William De Witt Hyde of Bowdoin College in 1891 urged that honorary degrees should be "sparingly and judiciously conferred."[3]

Undoubtedly some of these earlier and more flagrant abuses in the award of honorary degrees have been eliminated from American academic practice. But to what extent, even today, are they "sparingly and judiciously conferred"? How does usage vary among different institutions and in various groups of institutions?

What are legitimate and desirable standards or norms for conferring hon-

[1] S. E. Epler, *Honorary Degrees: A Survey of Their Use and Abuse* (Washington: American Council on Public Affairs, 1943), p. 9.

[2] C. F. Smith, "Honorary Degrees as Conferred in American Colleges," National Education Association, *Proceedings*, 1889, pp. 291–99.

[3] W. D. Hyde, "The Policy of the Small College," *Educational Review*, November 1891, p. 317.

orary degrees by American institutions of higher education? *Standards* indicate what should be done; *norms* indicate what actually is done. Standards are necessarily more subjective in nature, and in practice must be established by each institution concerned. Norms, however, may be purely objective. They lend themselves to statistical summary and presentation. They enable an institution to measure its own practice against those of other similar institutions.

This study is concerned primarily with *norms*. Its purpose is to report in comparable form the relative number of honorary degrees conferred by various significant groups of American universities and colleges—those that have received the approval of recognized accrediting agencies. Before presenting these norms, however, a few historical facts will give a better background for consideration of them.

Historical summary

The first honorary degree given in America appears to have been the degree of S.T.D. conferred by Harvard University on its president, Increase Mather, in 1692, fifty-six years after its founding. No complete record is available of the total number or variety of honorary degrees which have been conferred since that early date. A study of the institutional exhibits in the seventh edition of *American Universities and Colleges*, to be considered in greater detail later, shows that 542 institutions report that they have conferred more than 77,000 honorary degrees since their foundation. Epler notes that between 1872 and 1900 nearly two-thirds of the honorary degrees were doctorates, almost one-third were masters. Of the honorary doctorates, D.D.'s made up 59 percent, LL.D.'s 29 percent, and Ph.D.'s 7 percent.[4] Fortunately, the honorary Ph.D. has been completely abandoned in American universities, now being conferred only as an earned degree, although an honorary Ph.D. degree was conferred as late as 1937, barely twenty years ago.

While in most institutions the number of honorary degrees granted in any one year is usually severely restricted, there have been a few occasions of special significance, especially anniversaries, when large numbers have been conferred at a single time. Thus in 1929 Columbia University on the occasion of its 175th anniversary, conferred 134 honorary degrees, the record for any institution in a single year. Harvard University, at its tercentenary in 1936, conferred 62 honorary degrees.[5] At its 250th anniversary in 1886 it conferred honorary degrees on 42 persons. Princeton University at its 150th anniversary in 1896 conferred 79 honorary degrees. Yale University at its 200th anniversary in 1901 gave nearly 60 honorary degrees.

Some idea of the general historical development of honorary degrees and their relation to earned degrees is given in Table 1, for which the early data have been taken from the annual reports

[4] Epler, *op. cit.*, p. 47.

[5] Epler (*op. cit.*, p. 57) gives this number as 86. He says: "Harvard's tercentenary provided the setting for a huge mass conferring of 86 honorary degrees." But the *Tercentenary of Harvard College* (Cambridge: Harvard University Press, 1937) reports a list of 86 scholars who were to be invited, their invitations to include "the offer of an honorary doctorate, except in the case of those invited scholars who had already been thus honored by the university." (Pp. 8–9) The same volume (pp. 217–21) states: "The honors of the Tercentenary were conferred upon sixty-two distinguished scholars," and gives the names and citations for these 62, all of whom received honorary doctorates. It may be assumed that the other 24 invited scholars had already been similarly honored by Harvard University. Even more erroneous is the report of the United States Office of Education which in its *Biennial Survey* for 1936 says that only 12 honorary degrees were conferred by Harvard University in 1936.

TABLE 1: EARNED AND HONORARY DEGREES CONFERRED BY ALL AMERICAN UNIVERSITIES AND COLLEGES, ACADEMIC YEARS 1889–90 TO 1943–44

YEAR	NO. OF INSTITUTIONS	NO. OF DEGREES CONFERRED		NO. OF HONORARY DEGREES PER 1,000 EARNED DEGREES
		Honorary	Earned	
1889–90	(*)	735	16,674	44.1
1899–1900	621	702	29,362	23.9
1909–10	(*)	679	39,740	17.1
1919–20	(*)	989	52,179	19.0
1929–30	941	1,347	128,243	10.5
1939–40	1,154	1,452	216,431	6.7
1941–42	1,186	1,619	213,491	7.6
1943–44	1,179	1,292	141,594	9.1

* Comparable data for these years, not available.

of the U.S. Commissioner of Education and the more recent data from the *Biennial Surveys* of the U.S. Office of Education.

The number of degrees, both honorary and earned, given in 1944 was abnormally low because of World War II. In the half century, however, from 1890 to 1942, the number of honorary degrees more than doubled while the number of earned degrees in the same period increased some thirteenfold, as shown in Table 1. Hence, the number of honorary degrees per thousand earned degrees showed a marked decrease, as indicated in the last column of Table 1.

A figure of somewhat less than ten honorary degrees per thousand earned degrees would seem to be close to "normal" for the proportion of honorary degrees in the later years covered by Table 1. This tentative norm may be compared with the more detailed norms derived and reported later.

Data currently available

Unfortunately, the U.S. Office of Education ceased asking for data on number and type of honorary degrees for its biennial surveys after 1943–44. Apparently the only agency which has made any systematic effort at regular intervals to collect such information on a nation-wide basis since 1944 is the American Council on Education for its quadrennial reference volume *American Universities and Colleges*. The latest edition of this well-known and reliable reference work (Seventh Edition, 1956) contains detailed exhibits for 969 accredited institutions of higher education. It should be noted, however, that this volume does not include reports for 392 four-year institutions which are listed in the 1956–57 *Directory* of the U.S. Office of Education, but which are not accredited by the appropriate agencies. Some of these, doubtless, also have conferred honorary degrees. Many others, such as Bible institutes, art schools, music schools, and Catholic seminaries for men studying for the priesthood, have not made a practice of conferring honorary degrees.

Each of the 969 accredited institutions in *American Universities and Colleges* was asked to furnish four figures: number of earned and number of honorary degrees conferred for the year ending June 30, 1955; and total number of earned and total number of honorary degrees conferred since the foundation of the institution. Such data are published for 542 institutions, or 56 percent of those included in the volume. Some others are known to confer honorary

degrees but made no report of the number since their foundation. Many others, such as state teachers colleges, have not conferred honorary degrees.

Honorary degrees reported

Table 2 gives significant data for each of the ten institutions which reported more than 1,000 honorary degrees conferred since its foundation.

Striking variations are noticed at once from a consideration of this table. Of the first four institutions listed, Harvard, although the oldest, is surpassed in number of honorary degrees conferred by the other three—Yale, Dartmouth, and Princeton. Harvard is credited with more earned degrees but fewer honorary degrees than any of the other three. Yale's number of honorary degrees per thousand earned degrees is more than twice that of Harvard; Princeton's is more than three times greater; Dartmouth's is five times greater.

Columbia University has the largest number of earned degrees, but its ratio of honorary to earned degrees is the smallest of the ten institutions included in the table. The two smallest institutions in the table, in terms of enrollment, are Union College and University and Lafayette College, but they have the largest ratios of honorary to earned degrees, each more than thirteen times the figure for Columbia and almost seven times the figure for Harvard. Lafayette, which was founded 86 years later than the University of Pennsylvania and which has granted less than a tenth of the number of Pennsylvania's earned degrees, has conferred almost as many honorary degrees as Pennsylvania.

Although two factors—(1) age of the institution and (2) size of enrollment—are evidently important in Table 2, they do not explain all the differences noted. In general, the older the institution, the more degrees of both types; the larger the institution, the more degrees of both types. Therefore, the remaining tables containing norms and other information for different types of higher educational institutions will consist of reports on the *number of honorary degrees per thousand earned degrees* since the foundation of the institution. This number has been computed for each of the 542 reporting accredited institutions.

Table 3 shows a classification of the frequency of institutions for the different numbers of honorary degrees per thousand earned degrees.

TABLE 2: INSTITUTIONS REPORTING THE LARGEST NUMBER OF HONORARY DEGREES CONFERRED SINCE THEIR FOUNDATION TO JUNE 30, 1955

INSTITUTION	NO. OF YEARS SINCE FOUNDATION	NO. OF DEGREES CONFERRED		NO. OF HONORARY DEGREES PER 1,000 EARNED DEGREES
		Honorary	Earned	
Yale University	256	2,644	89,973	29.4
Dartmouth College	188	1,907	26,618	71.6
Princeton University	211	1,857	38,115	48.7
Harvard University	321	1,800*	125,000*	14.4
Columbia University	203	1,525	216,127	7.1
Brown University	193	1,407	26,389	53.3
Union College and University	162	1,200	12,375	97.0
Rutgers University	191	1,109	37,028	30.0
University of Pennsylvania	217	1,074	118,672	9.1
Lafayette College	131	1,004	10,389	96.6
Total		15,527	700,686	22.2

* "In excess of."

TABLE 3: INSTITUTIONS CLASSIFIED BY NUMBER OF HONORARY DEGREES PER THOUSAND EARNED DEGREES AWARDED FROM FOUNDATION OF INSTITUTION TO JUNE 30, 1955

No. of Honorary Degrees per 1,000 Earned	*No. of Institutions*
200–299.9	2
100–199.9	15
50– 99.9	60
40– 49.9	29
30– 39.9	42
20– 29.9	54
15– 19.9	35
10– 14.9	49
5– 9.9	83
1– 4.9	116
Total	542

Percentile norms

Table 4 shows the distribution of the 542 institutions of Table 3 but in a form more convenient for comparison of any institution with the general distribution —a table of percentile norms for each 5th percentile point.

From this table, for example, it may be seen by simple interpolation that Yale University, shown with a ratio of 29.4 in Table 2, stands at the 72nd percentile of the entire 542 institutions: that is, 72 percent of the institutions have a lower ratio than Yale. On the other hand Columbia University, with the lowest ratio shown in Table 2, is at about the 40th percentile point, well below the median but far above the minimum. Similarly, any institution, by taking the data given for it in *American Universities and Colleges*, can determine its percentile ranking in comparison with the total of 542 reporting institutions.

TABLE 4: PERCENTILE NORMS FOR NUMBER OF HONORARY DEGREES PER THOUSAND EARNED DEGREES FOR 542 INSTITUTIONS FROM FOUNDATION TO JUNE 30, 1957

Percentile	*No. of Honorary Degrees per 1,000 Earned Degrees*
100 (maximum)	**264.9**
95	89.6
90	66.5
85	48.7
80	38.8
75 (upper quartile)	**31.1**
70	27.9
65	22.2
60	17.2
55	13.8
50 (median)	**11.2**
45	9.0
40	6.9
35	5.8
30	4.5
25 (lower quartile)	**3.4**
20	2.5
15	1.9
10	0.89
5	0.36
0 (minimum)	**0.02**

It may be of some interest to show the actual figures as well as the ratios for the upper 3 percent of institutions, the 16 which conferred more than 100 honorary degrees for each thousand earned degrees. These are shown in Table 5. It may be noted that all of these 16 institutions are privately controlled, most of them denominationally controlled or church related.

Institutions vary among themselves so much, however, in control, in size, in function, and in other factors, that a series of specialized group norms will often be more useful and significant than those shown in Table 4 in enabling an institution to make comparisons with other institutions of its own type or group. For this purpose Tables 6, 7, 8, and 9 have been constructed on the same general plan. Each shows the maximum, upper-quartile, median, lower-quartile, and minimum number of honorary degrees conferred per thousand earned degrees for particular groups of institutions, classified by control, by size, and by regional location, and for three special groups—those attended predominantly by Negroes, those attended only by women, and institutions which are members of the Association of American Universities. The general arrangement in each table is by size of the median, the most significant single figure in the various tables of norms. Also important are

TABLE 5: INSTITUTIONS REPORTING THE LARGEST NUMBER OF HONORARY DEGREES FOR EACH THOUSAND EARNED DEGREES CONFERRED FROM FOUNDATION TO JUNE 30, 1955

INSTITUTION	NO. OF DEGREES CONFERRED		NO. OF HONORARY DEGREES PER EACH 1,000 EARNED
	Honorary	Earned	
Blackburn College,* Ill.	133	502	264.9
Dropsie College,† Pa.	29	111	261.3
Hobart College, N. Y.	800	4,300	186.0
Bard College, N. Y.	174	974	178.6
St. John's College, Md.	341	1,992	171.2
Tusculum College, Tenn.	285	1,685	169.1
University of the South, Tenn.	491	2,989	164.3
Norwich University, Vt.	424	3,125	135.7
Trinity College, Conn.	846	6,304	134.2
Hanover College, Ind.	420	3,178	132.2
Wesleyan University, Conn.	993	8,232	120.6
Southwestern at Memphis, Tenn.	306	2,666	114.8
Westminster College, Mo.	230	2,011	114.4
Ursinus College, Pa.	489	4,590	106.5
Marietta College, Ohio	442	4,324	102.2
Hamilton College, N. Y.	611	6,088	100.4

* Blackburn College was a junior college for thirty years (1918 to 1947–48).
† Dropsie College is exclusively a postgraduate institution "for Hebrew and Cognate Learning."

TABLE 6: PERCENTILE NORMS AT FIVE POINTS SHOWING NUMBER OF HONORARY DEGREES FOR EACH THOUSAND EARNED DEGREES AWARDED BY INSTITUTIONS, CLASSIFIED BY TYPE OF CONTROL, FROM FOUNDATION TO JUNE 30, 1955

INSTITUTION	No.	PERCENTILE NORMS				
		Maximum	Upper Quartile	Median	Lower Quartile	Minimum
Total	542	264.9	31.1	*11.2*	3.4	0.02
Publicly controlled	129	60.8	6.4	*2.9*	0.8	0.02
State	117	60.8	6.4	*2.9*	0.9	0.02
Municipal	12	22.7	4.0	*2.2*	0.2	0.14
Privately controlled	413	264.9	40.7	*16.7*	6.2	0.03
Episcopal	4	186.0	.....	*171.5*	.....	134.2
United Presbyterian	5	94.2	.....	*74.5*	.....	11.7
Presbyterian*	40	264.9	86.2	*55.4*	30.4	2.2
Evang. United Breth.	6	86.2	.....	*46.6*	.....	10.0
Jewish	4	261.3	.....	*45.6*	.....	25.9
Cong.-Christian†	14	94.1	58.3	*34.7*	8.8	2.1
Lutheran	21	98.7	63.6	*33.9*	14.7	4.6
Evang. & Reformed	5	106.5	.....	*33.9*	.....	5.3
Methodist‡	62	97.1	37.4	*24.2*	13.2	0.2
Baptist	35	86.6	44.6	*24.0*	9.8	0.3
Church of Brethren	6	28.3	.....	*18.6*	.....	6.3
Miscellaneous§	12	85.7	.....	*11.9*	.....	0.9
Disciples of Christ	9	54.5	21.6	*11.2*	6.4	5.8
Nazarene	3	25.7	.....	*10.8*	.....	4.5
Nondenominational	110	171.2	28.9	*9.3*	3.9	0.03
Friends	4	16.0	.....	*8.9*	.....	5.4
Roman Catholic	77	50.7	13.1	*5.9*	2.4	0.3

* Includes 2 Presbyterian-Congregational, 1 Presbyterian-Methodist.
† Includes 2 Congregational-Presbyterian, 1 Congregational-Methodist.
‡ Includes 1 Methodist-Presbyterian, 1 Methodist-Congregational.
§ Includes 2 Church of Christ, 2 Mennonite, 2 Reformed Church in America, 1 Advent Christian, 1 Christian Science, 1 Church of God, 1 Moravian, 1 Seventh-Day Adventist, 1 Universalist.

the upper and lower quartiles. Any institution whose ratio falls within these quartile limits may be sure that it does not vary too widely from the norm—that it is within the range of the middle 50 percent of the practice in the particular group reported.

The first line of Table 6 (or Table 4 as a whole) shows striking variations among the different institutions which have given honorary degrees. The maximum ratio is more than 13,000 times as great as the minimum. The maximum is shown by Blackburn College, Illinois, with 133 honorary degrees and 502 earned degrees (see Table 5). The minimum is the University of Washington with 1 honorary degree and 63,671 earned degrees.

Even if these extremes be omitted, there is still marked variation between the quartile points. The upper-quartile value is more than nine times the lower-quartile value. Half of the institutions fall between these two values. It is of interest that the median for all institutions is 11.2, very near the figure mentioned earlier in connection with the U. S. Office of Education data of Table 1.

It may be noted that the norms for the privately controlled institutions (Table 6) are very much higher than for those under public control. The median for the privately controlled group is more than five times that of the publicly controlled group. As a matter of fact the first 59 institutions on the list are under private control. Virginia Military Institute, which is number 60, is the highest publicly controlled institution. It has conferred 60.8 honorary degrees per thousand earned degrees.

When the institutions are arranged according to size of enrollment (using the enrollment figures from *American Universities and Colleges*), as is done in Table 7, it is seen that there is a steady increase in median with decrease in size from the very large institutions to the small ones—for which the median is seven times greater than that for the very large ones. This trend breaks down, however, in the case of the very small institutions for which the median is only slightly larger than for the medium-sized institutions.

The comparison of institutions by regional location (Table 8) shows a distinctly larger median in the older, established institutions of the East than in those of the Far West.

Table 9 shows that the median for Negro institutions is only a little more than half as great as for all institutions as shown in the preceding three tables. The institutions attended predominantly by Negro students have been quite con-

TABLE 7: PERCENTILE NORMS AT FIVE POINTS SHOWING NUMBER OF HONORARY DEGREES FOR EACH THOUSAND EARNED DEGREES AWARDED BY INSTITUTIONS, CLASSIFIED BY SIZE OF ENROLLMENT, FROM FOUNDATION TO JUNE 30, 1955

INSTITUTION	No.	PERCENTILE NORMS				
		Maximum	Upper Quartile	Median	Lower Quartile	Minimum
Total	542	264.9	31.1	*11.2*	3.4	0.02
Very large (10,000–49,999)	31	29.7	6.4	*3.4*	0.3	0.02
Large (2,000–9,999)	135	97.0	9.1	*4.3*	1.9	0.05
Medium (1,000–1,999)	97	134.2	30.2	*17.1*	7.1	0.06
Small (500–999)	153	186.0	45.9	*23.6*	7.1	0.18
Very small (under 500)	126	264.9	51.0	*18.0*	5.2	0.40

TABLE 8: PERCENTILE NORMS AT FIVE POINTS SHOWING NUMBER OF HONORARY DEGREES FOR EACH THOUSAND EARNED DEGREES AWARDED BY INSTITUTIONS, CLASSIFIED BY REGIONAL LOCATION, FROM FOUNDATION TO JUNE 30, 1955

LOCATION	NO. OF INSTITUTIONS	PERCENTILE NORMS				
		Maximum	Upper Quartile	Median	Lower Quartile	Minimum
Total	542	264.9	31.1	*11.2*	3.4	0.02
Middle States	113	261.3	35.0	*13.6*	5.1	0.03
New England	49	135.7	38.8	*12.8*	5.5	0.20
North Central	196	264.9	37.9	*11.6*	3.2	0.05
Southern	123	169.1	28.8	*11.2*	2.7	0.03
Northwest	32	89.4	23.0	*9.8*	2.7	0.02
Western	29	48.4	11.3	*5.4*	1.9	0.05

TABLE 9: PERCENTILE NORMS AT FIVE POINTS SHOWING NUMBER OF HONORARY DEGREES FOR EACH THOUSAND EARNED DEGREES AWARDED BY CERTAIN GROUPS OF INSTITUTIONS, FROM FOUNDATION TO JUNE 30, 1955

GROUP	NO. OF INSTITUTIONS	PERCENTILE NORMS				
		Maximum	Upper Quartile	Median	Lower Quartile	Minimum
Negro institutions	31	47.9	13.9	*6.3*	3.2	0.8
Publicly controlled	8	23.4	12.0	*4.0*	2.7	2.3
Privately controlled	23	47.9	15.5	*7.0*	4.0	0.8
Women's institutions*	64	31.9	7.3	*2.6*	1.2	0.06
Members of Association of American Universities	27	53.3	8.1	*4.2*	1.8	0.02

* Includes 2 state, 1 municipal, 14 Protestant, 27 Roman Catholic, 20 nondenominational.

servative in conferring honorary degrees.

The same table shows that the group of 64 institutions for women which have conferred honorary degrees have a median which is less than one-fourth that for all institutions. The women's colleges have been very conservative in the conferring of honorary degrees.

Smaller colleges and those more recently established are often likely to look to the older and larger institutions for guidance in various phases of organization and administration. For this reason particular interest attaches to practices of the 27 members of the Association of American Universities which have reported their numbers of honorary and earned degrees. This group of 35 institutions includes many of the outstanding universities of the country, both publicly and privately controlled. The median norm for these 27 institutions is much lower than for the total of 542 institutions—4.2 as compared with 11.2. This is considerably higher, however, than the norm for women's institutions.

In addition to the 27 members of the association summarized above, three others (Ohio State University, University of Rochester, and Washington University) have conferred honorary degrees, but data given are insufficient to compute ratios for them. Five apparently have never conferred honorary degrees—California Institute of Technology, Massachusetts Institute of Technol-

ogy, Stanford University, University of Virginia, and Vanderbilt University.

Honorary degrees for women

Most honorary degrees have been conferred on men. Data on honorary degrees for women are scanty. In the half century from 1882 to 1932, however, R. A. Smith found that honorary degrees were conferred on at least 217 women by 123 American institutions of higher education.[6] He was unable to find any record of an honorary degree conferred on a woman earlier than 1882, nor does he give the name of the institution or of the recipient of the 1882 degree. He tabulates the ages of the recipients, which varied from ninety-nine years to thirty-one years. The former was Emily Howland, educator, who in 1926 received an honorary degree from the University of the State of New York (the state department of education) at its autumn convocation, the first woman to be so honored by that body. The latter was Eva Le Gallienne, actress, who in 1930 was given an honorary doctorate by Smith College. Although Mr. Smith does not so state, according to *Who's Who in America,* Miss Le Gallienne received an honorary degree of master of arts three years earlier from Tufts College when she was only twenty-eight years of age.

Women have received 13 percent of the earned doctorates in the country.[7] Three quarters of the earned doctorates in the United States have been conferred since 1932. If Mr. Smith's figures for honorary degrees conferred on women be extended in the same proportion to 1955, they would suggest about 850 such degrees, or barely 1 percent of the total number of honorary degrees reported by the institutions represented in the 1956 edition of *American Universities and Colleges.*

Honorary degrees in 1954–55

The analysis up to this point has been concerned with the *total number* of honorary degrees and earned degrees conferred since the foundation of the institutions covered. *American Universities and Colleges* (Seventh Edition) also published the number of honorary degrees reported as conferred for the year ending June 30, 1955. A summary of these reports shows that 469 accredited institutions (48 percent of those included in the volume) conferred 2,246 honorary degrees in 1954–55, or an average of almost five per institution. In addition a number were doubtless conferred by the approximately 400 nonaccredited institutions. Thus, the current crop of honorary degrees is substantially greater than the maximum of the reports of the U.S. Office of Education as shown in Table 1 where the highest for any one year prior to 1944 was 1,619.

The largest institutional numbers for 1954–55 were reported by Columbia University with 76, followed by New York University with 42, Yale University with 28, and Michigan State University with 27. Harvard University reported only 15 while it conferred 3,272 earned degrees. By contrast, Emerson College, only a few miles away in Boston, conferred 14 honorary degrees, almost as many as Harvard, but only 47 earned degrees. Harvard thus conferred 4.6 honorary degrees per thousand earned degrees, Emerson 290.8, or more than sixty times as great a proportion. Thirty-seven institutions reported ten or more honorary degrees each in 1955–56.

Honorary degrees in 1955–56

Nace has compiled a list of 1,837 honorary degrees conferred by 418 Amer-

[6] Ray A. Smith, "Women Recipients of Honorary Degrees in the United States" (Master's thesis, New York University, 1935), 29 pp. MS.

[7] *American Universities and Colleges,* 1956, p. 66.

ican institutions of higher education in 1955–56.[8] He gives the names of the individual recipients, their positions, degrees, and frequent supplementary notes regarding them. He states that his list was obtained by personal letters, press clippings, and questionnaires to approximately 700 institutions. The largest number of honorary degrees was reported by Birmingham-Southern College, which conferred 28 in connection with its centennial celebration in December 1955. The next highest number is credited to Trinity College, Connecticut, with 20. Women were recipients of 148 of the honorary degrees, or 8 percent of the total number Nace lists. The largest number of women were so honored by Western College for Women with 9, followed closely by Smith College with 8. Nace's list, valuable and unique as it is in the detailed information it gives, is not complete and therefore cannot be used to infer any decline in the total number of honorary degrees from 2,246 conferred in 1954–55 by regionally accredited institutions, as reported in the preceding paragraph. A summary of the different degrees reported by Nace shows the following distribution of the most frequently conferred honorary degrees:

Degree	*Number*	*Percent*
LL.D.	729	39.7
D.D.	335	18.2
Sc.D.	225	12.3
L.H.D.	191	10.4
Litt.D.	115	6.3
Eng.D.	37	2.0
Mus.D.	25	1.4
D.F.A.	16	0.9
Ped.D.	11	0.6
D.C.L.	10	0.5
M.A.	26	1.4
16 others	63	3.4
Not stated	54	2.9
Total	1,837	100.0

Summary and conclusions

The total number of earned degrees reported by the 542 institutions in the 1956 edition of *American Universities and Colleges* since their foundation to June 30, 1955, is 6,291,779; the number of honorary degrees is 77,116. This is equivalent to 12.3 honorary degrees for each thousand earned degrees, slightly larger than the median figure of 11.2 reached by detailed consideration of the ratios in the separate institutions.

Some educational leaders have advocated the abolition of honorary degrees entirely in American higher education. Some institutions have conscientiously avoided giving them at all. Others have been generous, even profuse, in the bestowal of these honors. Undoubtedly some institutions have grossly overworked the honorary degree privilege and thus tended to bring the whole field of such honorifics into disrepute. Some so-called diploma mills in the past have also tended to bring "earned" degrees into disrepute. The remedy, however, has been not to abolish all earned degrees because the term has sometimes been abused, but to improve the practices and standards for awarding them. The same may be said for honorary degrees. The baby need not be thrown out with the bath.

[8] Ed Nace, "Honoris Causa, 1955–56," 34 pp., mimeographed, and Supplementary List, 19 pp., mimeographed. Obtainable at 50 cents from the author at Box 279, Bedford, Pa. In addition to the 418 institutions conferring honorary degrees in 1955–56, Nace lists 143 which stated they conferred no such degrees that year, and says that "more than a hundred" failed to reply to his inquiry. The total of these three groups, however, is hardly half of the 1,361 four-year institutions listed in the 1956-1957 *Education Directory—Higher Education* of the U.S. Office of Education. His list includes at least 22 institutions which are not regionally accredited, three of which are not listed by the U. S. Office of Education.

The data and norms presented in this article should enable any institution to study more carefully and perhaps helpfully its honorary degree practices in comparison with those of other comparable institutional groups and perhaps gradually to bring them into closer agreement with commonly recognized normal usage in American colleges and universities. The legitimate use of honorary degrees can serve an important function, as suggested in the opening paragraph of this article. That they have sometimes been conferred to excess or abused in other ways is no valid reason for abandoning their use entirely, but rather it should be an incentive for adjusting that use to make it conform more nearly to better American practice. It is hoped that a study of the tables presented in this article may facilitate such adjustment.

International Educational Activities of American Universities and Colleges

A Report of the Commission on Education and International Affairs of the American Council on Education, April 17, 1957

AMERICAN international educational undertakings have been a long-time concern of the various commissions and committees of the American Council on Education which have responsibilities in the international area, particularly the Commission on Education and International Affairs and the Committee on Institutional Projects Abroad.

The commission and the committee shared a growing belief that some confusion exists regarding the policies and procedures in this area and that American higher education, rather than the Government, should take the initiative in bringing about more orderly institutional participation in educational exchange programs. President Eisenhower emphasized the importance of greater private leadership in international education in his commencement address at Baylor University on May 25, 1956. Revelant excerpts from his address are given in Appendix A.

In order to validate or invalidate these assumptions, the commission and committee asked the American Council to secure certain basic information. First, they wanted to know the views of American educators on the policies which should govern their work in this field. Second, they wished to obtain data on the extent of present participation of American institutions in international education, as well as their willingness and ability to do more.

The American Council secured the information as requested by a survey of its 852 member institutions. The results validated the concerns of the commission and the committee and brought into sharp focus certain important issues. These results are presented in the interpretative summary below and in the more detailed analyses which follow.

"The Time of Testing and Trials Has Passed": An Interpretative Summary

Educational institutions believe that the human mind will dictate the course of the future. When minds search together for the common heritage of truth, a cross-fertilization of ideas and understanding results. This is an educational process that takes place without regard to national boundaries. It has a vital part to play in ensuring a future of peace and progress.

Because of these convictions, American institutions have supported international educational activities—their own and those sponsored by the Government. Their work in this field, like the Government's, has increased over the years as this nation's undertakings in international education have grown. Their current investments are heavy. Current expenditures are also heavy, as indicated graphically below.

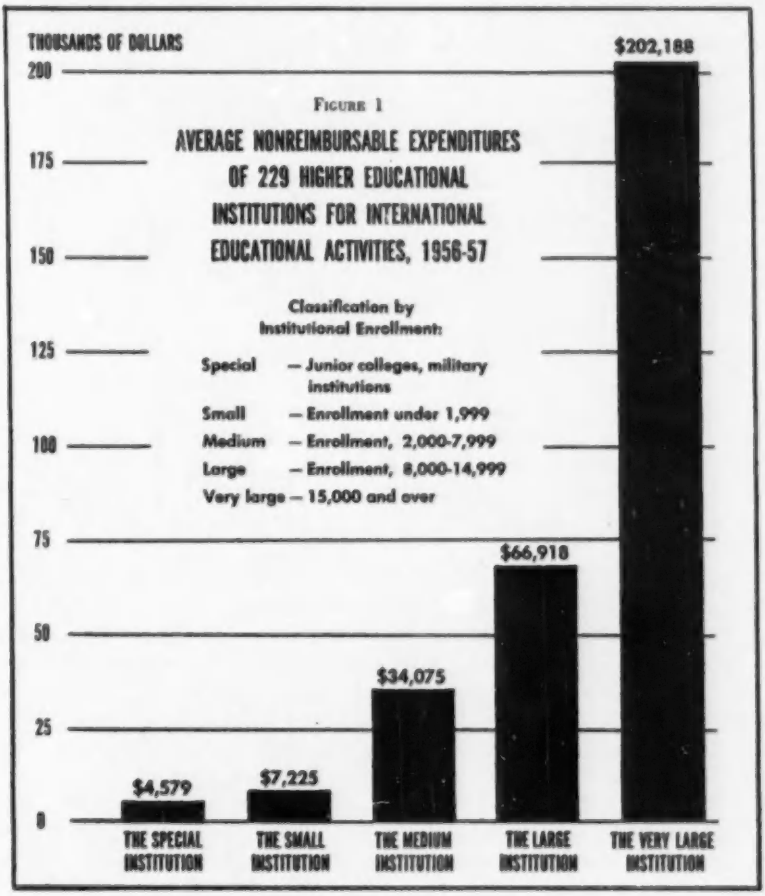

FIGURE 1

AVERAGE NONREIMBURSABLE EXPENDITURES OF 229 HIGHER EDUCATIONAL INSTITUTIONS FOR INTERNATIONAL EDUCATIONAL ACTIVITIES, 1956-57

Classification by Institutional Enrollment:

Special — Junior colleges, military institutions
Small — Enrollment under 1,999
Medium — Enrollment, 2,000-7,999
Large — Enrollment, 8,000-14,999
Very large — 15,000 and over

The growth of international educational activities has been haphazard. Different Government and private programs have developed at different times to meet different purposes. Confusion has resulted—confusion which threatens to obscure the basic educational process involved and to jeopardize the effectiveness of the national effort. Examples of

confusion are numerous and include instances of uncoordinated activity on the part of Government and private agencies and institutions.

American colleges and universities believe that "the time of testing and trials has passed"—as one institution phrased it—and that order must be established in this area at the instigation of American higher education. The consensus is that certain basic steps must be taken to this end.

First, American higher education should work toward general Government-private agreement that the broad purpose of international educational activities is to *educate* so as to bring about understanding and exchange of ideas across national boundaries. This educational process will have other beneficial results such as developing the economic or social structure of the countries involved.

Second, American higher education should insist on greater participation in the development of policies and programs for Government-financed activities which are conducted at the university level. Educational programs should be developed and carried out by educators within the framework of national policy and of country-priority determinations as established by the Government. This voice in the Government's programs should be used to ensure more equal opportunities for participation by smaller, less well-known institutions.

Third, American higher education should ensure the establishment of better channels of communication among governmental and private agencies and institutions. The Government does not understand the problems our institutions face in conducting international educational programs. Conversely, the institutions do not understand Government policies and procedures, nor do many institutions know what opportunities for service exist. Furthermore, neither the Government nor private agencies nor institutions know the full range of each others' programs; duplication and overlapping result.

American institutions have no magical formula for accomplishing these necessary steps. They seek leadership.

If orderly participation can be assured, and if certain other obstacles can be overcome, American colleges and universities are willing to expand their work in international activities. A great many smaller institutions are in fact eager to expand or initiate new international educational programs. Taking a realistic, responsible view of the demands now being made on their finances, personnel, and facilities, American institutions temper their willingness to expand by stating that their present resources will not permit increased activity. The principal obstacle is financial. Funds would have to be provided from outside sources for annual expenses, for capital investments in housing, laboratories, and other buildings, and for additional faculty and other staff. The availability of individuals qualified to participate in these activities at the university level will present another problem.

If the obstacles could be removed, the expansion would be great. Because of their belief in the importance of international educational activities, American institutions would like to see this expansion take place. They seek leadership in making it possible.

The Report and the Survey It Covers

The survey was conducted by means of a questionnaire which was sent on January 10, 1957, from Arthur S. Adams, president of the American Council on Education, to the heads of the 842 member institutions of the Council. The questionnaire was developed by the staffs of the Commission on Education and International Affairs and the Committee on Institutional Projects Abroad under the guidance of a Special Joint Committee. President Adams appointed the following members of this committee on June 19, 1956, at the request of the commission and the committee, from among the membership of both bodies:

Herman B Wells, president, Indiana University; *chairman*
John A. Hannah, president, Michigan State University; *vice-chairman*
Fred C. Cole, academic vice-president, Tulane University
Kenneth Holland, president, Institute of International Education
Walter H. C. Laves, chairman, Department of Government, Indiana University
Paul R. Hanna, coordinator, University of the Philippines-Stanford University Contract, Stanford University

In addition to the Special Joint Committee, the full membership of the Commission on Education and International Affairs reviewed and suggested revisions in the questionnaire and in the report.

The report of the survey was prepared for the Commission on Education and International Affairs by Mrs. Elinor P. Reams, special associate of the American Council. In her analysis of the survey replies she was assisted by Mrs. Carla Gelband, also of the Council's staff. Acknowledgment is also made of assistance given by others in the Council, including Miss Nellie Menick.

The body of the report which follows analyzes the replies to the eight questions of the questionnaire. The nature of the survey precluded purely statistical treatment and analysis. It also made impossible categorical conclusions on findings for individual questions, because all of them are interrelated. For example, institutions which expressed in Question 6 a willingness to expand if reimbursed, further qualified their willingness if they cited nonfinancial obstacles to expansion in Question 8. The preceding section, "The Time for Testing and Trials Has Passed," attempts to summarize and relate the findings for individual questions. It should be considered only in conjunction with the individual analyses in the following sections of this report.

The programs which the survey covered were designated "international educational programs" for purposes of this survey. These are an insti-

tution's cultural, technical, and other activities which involve the following:

a) Exchange-of-persons activities financed in whole or in part by the Department of State (for example, Fulbright program, Smith-Mundt program).

b) Technical assistance programs financed in whole or in part by the International Cooperation Administration (including institutional contracts between American and foreign universities, other programs for technical training of foreign nationals, etc.).

c) Exchange-of-persons activities financed in whole or in part by the United Nations or its specialized agencies.

d) Exchange-of-persons activities financed in whole or in part by a foreign government.

e) Exchange-of-persons activities financed in whole or in part by private individuals, organizations, and institutions.

f) Affiliation with foreign educational institutions exclusive of the university contract program of the International Cooperation Administration.

The survey did not cover programs which, for purposes of this survey, were called "American student programs." These are an institution's international activities which are designed primarily for American students as a part of the regular curriculum. Such programs are considered of great importance, but not within the purview of the survey.

As of March 15, 1957, more than 50 percent of the institutions had responded to the questionnaire, after only one follow-up request. This is believed to be a good response, considering the nature of the problems dealt with in the questionnaire and the fact that the replies required both thought and time. Furthermore, this survey promised no immediate results nor did it deal with problems of an emergency nature. It is believed that the responses were representative. They were analyzed in two major groups: (1) those received as of February 13, 1957 (207 replies), and (2) those received between February 14 and March 15, 1957 (226 replies). No significant difference was found in the nature of the responses for the two groups.

The number of responding institutions, classified by size or type of enrollments, is shown in Table 1.

The classification by enrollment is used throughout this report. The decision to use size as a principal means of categorization was essentially an arbitrary one. It was necessary to divide the replies in some way so as to permit study of them in manageable groups. The treatment proved especially helpful in isolating information about the smaller colleges.

TABLE 1: NUMBER AND PERCENTAGE OF INSTITUTIONS RESPONDING TO INTERNATIONAL EDUCATIONAL ACTIVITIES QUESTIONNAIRE, CLASSIFIED BY ENROLLMENT

ENROLLMENT*	NO. OF INSTITUTIONS		PERCENT RESPONDING
	Queried†	Responding‡	
Very large (15,000 and over)	23	13	56.5
Large (8,000–14,999)	35	24	68.6
Medium (2,000–7,999)	162	93	57.4
Small (under 1,999)	567	280	49.4
Special (junior colleges, military institutions)	65	23	35.4
Total	852	433	50.8

* The enrollment figures for the institutions were taken from the U. S. Office of Education, *Education Directory, 1955–56, Part 3, Higher Education.*

† Member institutions of the American Council on Education.

‡ A few additional replies were received after the deadline date of March 15; these were not tabulated.

Throughout the report the anonymity of the responding institutions has been preserved in accordance with the policies of the American Council on Education.

I. The Broad Purpose of International Educational Programs

From the questionnaire

Question 1. **What are your views as to the broad purpose of international educational programs?**

***Background*—The Council believes that international educational programs are generally regarded as undertakings which make a significant contribution to the international relations of the United States. However, the Council further believes that within this general frame of agreement there are conflicting views throughout the United States as to the broad purpose of these activities. For example, the primary purpose of international education activities are variously viewed from one or a combination of the following standpoints:**

1. **Encouraging of common understanding among nations.**
2. **Developing the economic or social structure of the foreign country participating.**
3. **Strengthening of educational, scientific, and cultural resources of mankind.**
4. **Acquainting the people of other nations with the strength and progress of the United States.**
5. **Enabling people of the United States to learn about, and benefit from, their association with the peoples of other nations.**
6. **Combating communism.**

The Council desires to obtain the views of educators on this question. The Council has found that the confusion as to the broad purpose of the programs is directly reflected in operations at the university level.

Furthermore, the Council is naturally concerned that commitments which American institutions are asked to undertake are entirely consonant with the traditions to which they adhere and to which they can uniquely contribute.

Analysis of response

Using the response rate as the criterion, this question aroused more interest than any of those which solicited opinion on policy (see Table 7, page 407). Of the total of 433 institutions replying, 405 answered this question, suggesting a widespread concern with the basic purpose of international educational activities, regardless of institutional size or experience with, and expenditures for, related programs.

In general, responding institutions commented on the six purposes listed in the questionnaire as examples of different viewpoints on this subject. The great majority of respondents indicated a preference for more than one of the examples. A summary tabulation of the 405 replies to this question indicates the following reaction to the six examples of purposes (see also Table 8, page 407, for an analysis of the reactions of institutions classified according to enrollment).

Purpose	No. of Institutions		
	Selected	*Rejected*	*Considered Purpose To Be Secondary*
1. Encouraging common understanding among nations	309	0	21
2. Developing the economic or social structure of the foreign country participating	123	10	41
3. Strengthening of educational, scientific, and cultural resources of mankind	242	1	19
4. Acquainting the people of other nations with the strength and progress of the United States	89	21	53
5. Enabling people of the United States to learn about, and benefit from their association with, the peoples of other nations	191	2	44
6. Combating communism	88	17	59

Not all the institutions confined themselves to comments on the six examples of purpose. Almost a third of the respondents advanced viewpoints that were significant additions to, or variations from, those listed as examples in the questionnaire. These include the statement from the President of Harvard University which, together with the reply from the President of the American Council on Education, is reprinted in Appendix B (page 402). A summary of the views most frequently expressed, and often interrelated, is as follows:

1. The primary purpose of international educational activities is to educate (to further the development of intellectual and moral excellence of the individual); and the essential base for a soundly conceived program is the most effective use of American educational re-

sources by, as one institution contended, ". . . sending our experience abroad where needed, by bringing in resources needed in our program, or by providing educational experience for students from abroad when individual educational goals can best be achieved or supplemented here. . . . Such a program effectively conducted will have corollary values. . . . We may initiate, support, or extend these programs because of these values, but we dare not be confused about the nature of the basic program. . . ."

2. The fundamental objective of an international educational program is the same as for a local or national one—the transmission of knowledge essential for the advancement of human society. In commenting on such a purpose, one institution stated, " . . . Improve upon American schools, encourage an atmosphere of learning for its own sake, discourage the view that we are using our schools as weapons in the cold war, and truth seekers from all the world will come to us. . . ."

3. The basic purpose of educational exchange is to provide a two-way street for the exchange of ideas across national boundaries in the interests of peace and progress for the nations involved.

4. Educational exchange should have as one of its goals the bringing-together of individuals of intellectual ability from many countries in the pursuit of the common heritage of truth. These contacts will broaden the perspective of Americans and other nationals by helping them to understand the basic differences and likenesses in the cultures of their countries.

Suggestions most frequently were related to the above purposes. Other views were advanced, but no one of them was stated more than twice. These included proposals that the primary objective should be (1) to strengthen the United Nations, (2) to further the international relations of the United States, (3) to improve international, interracial, and intercultural relations, and (4) to draw together all peoples in a common belief in God.

II. The Roles of the Government and of Higher Education in the Conduct of International Programs

From the questionnaire

Question 2. **In your opinion, what are the most effective roles of the Government and of American higher education, respectively, in the conduct of international educational programs which are financed in whole or in part by the Government?**

***Background*—At the present the Government determines (1) national policies involving international educational programs, (2) the priority of need overseas as between various countries, and (3) the educational needs in a given country as well as the nature and extent of specific programs to meet them. American institutions and private agencies and organizations play a subsidiary role with respect to planning and direction of the activities, despite the fact that they have a great responsibility**

for operating them. (This situation obtains even though individual American educators serve on various Government-appointed boards and advisory bodies.)

Is this a proper division of responsibility? If not, what changes in relative responsibility would you recommend? In this connection, we would appreciate your views on (*a*) whether primary responsibility for program planning should rest with non-Governmental educational institutions and organizations or (*b*) whether this responsibility should be shared by Government or non-Government agencies on approximately an equal basis, or (*c*) whether it should remain in the hands of the Government.

Analysis of response

The response rate to this question (88.7 percent) suggests, as in the case of Question 1, a widespread interest in the subject on the part of all institutions. Out of 433 institutions responding to the questionnaire, 384 answered this question and directed their attention primarily to the *a*, *b*, and *c* questions in the questionnaire, as given above.

More than half of the responding institutions submitted special statements on the subject. These statements make it difficult to give a clear-cut summary of the nature of the replies, and some qualifying considerations must be applied.

The 384 institutions which responded to this question generally indicated the following preferences, with qualifying comments as noted. (See also Table 9, page 408, for an analysis of responses of institutions, classified by enrollment.)

Recommendations for Responsibility	*No. of Institutions*
a) Primary responsibility for program planning and development of educational policies should rest with non-Governmental educational institutions and organizations. (Additional comments indicated that this should be done in partnership with the Government which should be responsible for national policies and priority determinations on overseas needs.)*	70
b) Responsibility for program planning and development of educational policies should be shared by Government and non-Government agencies on approximately an equal basis. (A number of institutions amplified their answers by indicating either (1) that *a* above is preferable but that it would not be allowed by the Government or (2) that, in making this choice, they mean that program planning should be the responsibility of the institutions and that establishing national policies and priorities on overseas needs should be the responsibility of the Government.)*	247
c) Responsibility for program planning should remain in the hands of the Government. (About half of the respondents qualified their choice by stating that the Government should bring American institutions into the processes of policy-making and programming. Many of the remaining stated that they were influenced in their choice by the belief that the Government would not allow institutions to assume more responsibility. Others stated that since the Government "foots the bill," it is appropriate for it to assume the responsibility)	60
Certain replies were inadequate (not related to the question, etc.)	7
Total	384

* Some stressed the desirability of participation on program plans by educators and governments of cooperating countries.

It is believed that it would be accurate to say that the great majority of the institutions replying think it highly desirable for the Government and American higher education to operate as a partnership and for our institutions to assume greater responsibility in the program planning for international educational activities. Interesting opinions on this subject are quoted, as follows:

> It is essential that the Government continue to determine broad national foreign policy objectives within which private agencies must operate. Within these objectives, however, Government should recognize the tradition of autonomy and independence of our institutions of higher learning and of other voluntary agencies and should allow these institutions freedom of [making] decision[s] in all those professional and technical aspects of programs in which these institutions and agencies are best qualified. . . .
>
> . . . . . .
>
> The institution of higher education which is to carry out the program should be allowed to work cooperatively with the Government in planning the policies and programs in a given country. The Government will have to determine the priorities of need overseas. After the policies are established, the institution of higher education should be given a free hand to execute the program with the usual checks to be made by the Government. The Government checking should be more liberal than at present, because it is impossible to set up many general rules which will apply to all countries.
>
> . . . . . .
>
> Government should determine what programs are in the national interest and any necessary conditions of their operation. Educators should review such decisions and advise whether the programs can be [carried on] effectively under such conditions. With agreed-upon policies, the educational program should be freely directed by educators.
>
> . . . . . .
>
> The Government should act only as an intermediary in bringing scholars and schools together.
>
> . . . . . .
>
> We believe that the responsibility of selection of individuals to participate in this program should be the responsibility of the Government and that the program planning should rest with the educational institutions. Through the Government's representatives in foreign countries a better selection can be made of students to participate, and that will be of advantage to both countries.
>
> . . . . . .
>
> The Federal Government should be a facilitating rather than a controlling agency in the field of international education. Where control has to be exercised, as in the need for congruence between student selection and immigration laws, Government should ask for and get advice from educators on application of existing statutes to specific cases, as well as revision of existing legislation or enactment of new legislation. This recommendation leads to the conclusion that program planning should begin with the educators and implementation should be facilitated by Government. Operation of the program should be handled by educational institutions.
>
> . . . . . .

. . . The whole program should be under the control of a group chosen by the great national councils. . . . An organization of this sort now controls the recommendation for advanced Fulbright awards.

. . . The crux of the problem in my opinion is how to persuade the Federal Government—not to give up any of its fundamental authority or responsibility—but to organize itself in such a way as to incorporate in its mechanisms the best leadership American higher education can provide. International educational exchange programs flourish when both parties in the exchange are represented in the administration of the program.

. . . Educational policy, survey of needs program objectives, and operation of programs should be the responsibilities of education. If these are acceptable to Government agencies, well and good; but if an educational program does not meet the requirements of a given situation, the Government agencies should use programs of public relations or propaganda instead.

I believe that the United States Government should decide on the basis of its policy which nation should be helped. Then I believe that a private, disinterested, educational agency within the United States should be given the responsibility for designing the best program possible irrespective of political considerations in terms of the specific details of the program.

. . . Government should carry the deciding role in determining national policies, assuming consultations with representative educational authorities. Education should carry the determining role in the designation of priorities of need, the character of the need, and the kind and extent of the program. The present division of responsibility would not seem to be properly adjusted. Primary responsibility for program planning might well be shared by Government and non-Government agencies, but not on an equal basis. . . . In general, the major share of the responsibility for program planning should rest with non-Governmental agencies concerned with professional education.

III. Opinions on Possible Lack of Coordination among Government and Private Agencies

From the questionnaire

Question 3. **In the light of your experience, do you believe that there is a material lack of coordination among Government and private international educational programs?**

Question 4. **If so, what would you describe as the chief evidence of such lack of coordination?**

Question 5. **If your answer to 3 above is affirmative, what do you think is needed to achieve greater coordination?**

Analysis of responses

The response rate to these questions was comparatively low[1] and necessitates consideration as to whether or not enough institutions had opinions on the subject to make the response representative.

It should first be noted that answers to all three were to be predicated on experience. Table 2 indicates that this was done in the main, and that, generally speaking, only institutions now spending their own funds for international education gave an opinion.[2] In summary, it is believed that, in the light of the terms of the questions themselves, the response was representative.

Question 3

Of the 253 institutions answering the question, 161 (63.6 percent) expressed the opinion that there is a lack of coordination among Government and private programs. Although some of these institutions added comments expressing the view that some, although not enough, coordination already exists, the majority were convinced that there is "a serious lack" of coordination.

While 92 (36.4 percent) of the institutions felt that no serious lack of coordination exists, it should be noted that almost a third of this number practically reversed themselves by giving suggestions for achieving greater coordination. These reversals, and the number of affirmative replies to Question 3, lead to the belief that the majority of institutions want an improvement in coordination among Government and private programs.

[1] See Table 7 (page 407).

[2] More institutions (a small number) replied to Question 3 than reported current experience and expenditures. The basis for their replies is not known, but it may be possible that they relied on experience of previous years.

TABLE 2: RELATIONSHIP OF RESPONSES ON LACK OF COORDINATION TO EXPENDITURES OF INSTITUTIONS, CLASSIFIED BY ENROLLMENT

CATEGORY OF INSTITUTION	TOTAL RESPONSE TO QUESTIONNAIRE	NO. OF INSTITUTIONAL RESPONSES ON LACK OF COORDINATION					EXPENDITURES OF INSTITUTIONS FOR INTERNATIONAL EDUCATION		
		Question 3: Is There Lack?			Question 4: Opinion on Evidences of Lack*	Question 5: Suggestions for Improvement*	Reporting		Average Expenditure, 1956-57†
		Yes	No	Total			No.	Percent	
Very large	13	9	3	12	10	11	9	69.2	$202,188
Large	24	17	6	23	16	18	19	79.0	66,918
Medium	93	40	25	65	39	40	48	51.6	34,075
Small	280	89	54	143	69	91	146	52.1	7,225
Special	23	6	4	10	5	6	7	30.4	4,579
Total	433	161	92	253	139	166	229	52.9	$ 25,387

* These replies were not in all instances made by institutions which answered Question 3 affirmatively.
† See Table 3 for details.

Questions 4 and 5

As previously mentioned, many institutions which reported no lack of coordination gave evidence of a lack and suggested ways of correcting it in their responses to Questions 4 and 5. Conversely, a number of institutions reporting a lack of coordination in Question 3 did not give any evidence therefor or suggest remedial measures in their responses to Questions 4 and 5.

Most frequently mentioned areas of lack of coordination or—going beyond the question asked—the most frequently mentioned problems in the whole area were the following:

1. There is no unifying idea in the public program. The many Government programs appear to operate independently of, and differently from, each other.[8] Examples are duplication or noncoordination of activities here and abroad; differences in standards for selection and in individual subsidies for foreign visitors; confusion in regulations concerning visas, passports, and income taxes for foreign visitors. *(40 institutions)*

2. There are no generally accepted standards or procedures for selection of individuals participating in private programs or for those financing or arranging for their own study in another country. This results in the admission of some foreign students who are not adequately prepared. It also means that opportunities are not distributed adequately among deserving American students. *(12 institutions)*

3. Although governmental policy is said to favor representative participation in international educational activities, all colleges are not given an equal opportunity to participate. This applies particularly to smaller, less well-known institutions. *(15 institutions)*

4. Government programs involving private institutions are not planned nor operated so as to take into account the policies, programs, or problems of the institutions. Examples are: Government programs are often timed without reference to university schedules; Government programs often involve long delays in obtaining approval of personnel, salaries, and expenditures, thereby disrupting an institution's plans and programs, and necessitating long periods of operation on an institution's own funds; poor selection takes place with respect to the educability of the individuals selected; little consideration is given to specialization on the part of an institution. *(43 institutions)*

5. Private agencies do not know what the Government and other private agencies are doing in this field; conversely, the Government does not know what private agencies are doing. This means that participating agencies can give little attention to balance or to the specific needs of

[8] A number of these replies noted that the Department of State has taken recent steps aimed at coordination of its programs.

the countries involved in the educational programs.[4] It also means that nonparticipating institutions do not know what opportunities for service exist. *(57 institutions)*

6. There are a large number of Government and private programs with diverse goals and objectives which are frequently not in consonance with each other or with the goals and objectives of participants selected for the programs. *(8 institutions)*

Suggestions for solving the problems were varied and ranged from single, detailed recommendations, to comprehensive statements giving a number of suggestions. Suggestions most frequently related to the following, some of which are obviously duplicative in certain respects:

Suggestions	*No. of Related Replies*
1. American institutions should exert strong and articulate leadership in this field. They should work toward general agreement on and understanding of policies and procedures which take into account the educational aspects of the programs. They should insist on a strong voice in the planning and conduct of the programs themselves. (Opinion was divided on just how this should be accomplished, but a third of the replies suggested a coordinating body of representatives of Government and private agencies.)	67
2. The actual conduct of international educational programs should be centralized. (Again, opinion was divided on the best means of achieving this. Some suggested centralization of Government programs; some suggested centralization of all private programs; 16 of the total suggested the establishment of one agency for both Government and private exchanges.)	28
3. Better communication should be established among Government and private agencies and institutions so that the Government will understand educational objectives and problems; so that American institutions will be better informed on Government policies and procedures, as well as opportunities for service; so that public and private activities will supplement and complement each other effectively. (Various ways of accomplishing this were suggested. The most common suggestion, from 11 institutions, was the establishment of an information clearinghouse.)	52
4. American institutions and private agencies should work toward better coordination of their own programs, including the establishment of agreement on standards for admission and selection, establishment of a central source of information on placement opportunities for American students, etc.	18

IV. Present Expenditures and Investments and Potential Expansion

Nature of Questions 6, 7, and 8

Information on present institutional investments and expenditures and willingness and ability to expand international educational activities was requested in Questions 6, 7, and 8.

[4] One institution in commenting on this point stated, "While in . . . , we had the bitter experience of discovering that 12 governmental and private agencies trying to help the . . . knew little of the efforts of each other, and what is worse, three or four of them didn't even seem to care."

Question 6. **This question was directed to expenditures, exclusive of capital investments, for the following purposes:**

A. Grants to foreign visitors (whole or partial scholarships, fellowships, instructorships, or lecture grants).

B. Nonfaculty grants to Americans (whole or partial scholarships, fellowships, instructorships, or lecture grants to Americans being sent overseas).

C. Faculty and staff expenses (salaries and expenses of faculty members and other staff required in order for the institution to participate in international educational programs; pro-rata salaries and expenses when such individuals have other duties as in a case where a foreign student adviser or dean of foreign students spends a part of his time teaching regular classes; include any sabbatical expenses for faculty members on leave to participate in programs).

D. Expenses of any equipment and materials, exclusive of capital investments, needed to participate in the programs.

E. Other expenses (any other expenses, exclusive of capital investments, which the institution would not have if it did not participate in these programs; for example, overhead not included in direct costs, expenses of special demonstrations, lectures, etc., for foreign visitors).

Question 6 asked for (1) estimates of current (1956-57) nonreimbursable expenditures for these purposes and for (2) information on the institution's willingness to expand present programs or initiate new ones on a reimbursable basis if funds could be found, as well as estimates on the cost of such expansion on an annual basis.

Question 7. **This question was divided into three parts; the text follows:**

A. On the basis of a general estimate, how much has your institution spent during the past five-year period for expansion of facilities and for other capital investments (1) when such expenditures were required by reason of your participation in the programs covered in the introductory paragraph, and (2) when they were not reimbursable by the Government or other outside sources?

B. If you have contracted for future investments of this nature, what is your general estimate of the expenditure to be involved?

C. If you indicated in the Table under Question 6 that you would be willing to participate in expanded international educational programs, what would the estimated expansion require in the way of additional facilities and other capital investments?

Question 8. **This question asked, "What are the main obstacles, if any, at your institution to increased participation in international educational programs?**

Analysis of responses

The response rate to these questions was very good; only a few institutions failed to answer at all. The majority of institutions were responsive with data that could be tabulated.

TABLE 3: INSTITUTIONAL ESTIMATES OF PRESENT AND POTENTIAL EXPENDITURES FOR INTERNATIONAL EDUCATIONAL PROGRAMS, EXCLUSIVE OF CAPITAL INVESTMENTS

CATEGORY OF INSTITUTION	TOTAL RESPONSE TO QUESTIONNAIRE	NONREIMBURSABLE EXPENDITURES, ACADEMIC YEAR, 1956-57*				PARTICIPATION IN EXPANDED PROGRAMS, IF REIMBURSED†				
		No. of Inadequate Responses	No. Reporting No Expense	*Reporting Expenses*		No. of Inadequate Responses	No. Unwilling to Expand in Any Field	*Willing To Expand*		
				No.	Average Amount			No. Not Submitting Usable Estimates	Submitting Usable Estimates	
									No.	Average Amount
Very Large	13	3	1	9	$202,188	6	...	5	2	$1,002,630
Large	24	2	3	19	66,918	6	1	3	14	152,756
Medium	93	8	37	48	34,075	31‡	7	14‡	41	82,443
Small	280	17	117	146	7,225	86‡	5	64‡	125	22,590
Special	23	...	16	7	4,579	17	...	1	5	11,800
Total	433	30	174	229	$ 25,387	146‡	13	87‡	187	$ 55,651

* Exclusive of reimbursements from the Government or other sources.

† Significant expansion of activity would, of course, necessitate equivalent financial support. Sources of funds are as yet undetermined.

‡ Eight institutions (3 medium and 5 small) which did not give an adequate response to this question, later, in Question 8 expressed a desire to participate. This brings the total to 95 willing to participate, but not submitting estimates.

Present expenditures and investments

The replies indicated that during the current academic year almost 53 percent of the responding institutions are spending many millions of dollars for international education activities from their own funds. Sizable additional amounts have been obligated on a nonreimbursable basis by 28 institutions for capital investments made necessary by their participation in these activities. (See Tables 3 and 4.)

Many more institutions are spending from their own funds on international educational activities, but they could not give dollar figures because, as one institution phrased it, "We do not assemble data in a way that makes it possible for us to compile figures that will fit into the categories you have presented. I say, however, that we have expended very considerable sums of money and the fact that a given part of this is not reimbursable has been to us a source of concern."

Over half of the amount reported as being spent in 1956–57, exclusive

TABLE 4: CAPITAL INVESTMENTS NECESSITATED BY INTERNATIONAL EDUCATIONAL ACTIVITIES REPORTED BY INSTITUTIONS, CLASSIFIED BY ENROLLMENT

PURPOSE, CLASSIFIED BY ENROLLMENT OF INSTITUTION	TOTAL RESPONSE TO QUESTIONNAIRE	NO. SUBMITTING INADEQUATE OR NO RESPONSE	REPORTING ACTUAL AND ESTIMATED CAPITAL INVESTMENTS	
			No.	Average Amount
A. *Nonreimbursable expenditures in last five years:*				
Very large	13	10	3	$116,666
Large	24	17	7	79,642
Medium	93	80	13	642,373
Small	280	252	28	29,342
Special	23	23	.....	.....
Total	433	382	51	$197,645
B. *Contracts for future investments (nonreimbursable):*				
Very large	13	12	1	$ 75,000
Large	24	22	2	52,500
Medium	93	85	8	183,000
Small	280	263	17	6,671
Special	23	23	.....	.....
Total	433	405	28	$ 62,764
C. *Capital investments required for expansion listed under Question 6:*				
Very large	13	11	2	$1,025,000
Large	24	17	7	347,143
Medium	93	73	20	437,425
Small	280	231	49	137,196
Special	23	21	2	42,500
Total	433	353	80	$ 250,451

TABLE 5: SUMMARY OF ESTIMATES OF INSTITUTIONAL EXPENDITURES FOR INTERNATIONAL EDUCATIONAL PROGRAMS, CLASSIFIED BY PURPOSE

PURPOSE	TOTAL RESPONSE TO QUESTIONNAIRE	NONREIMBURSABLE EXPENDITURES, ACADEMIC YEAR, 1956–57*				PARTICIPATION IN EXPANDED PROGRAMS, IF REIMBURSED†				
		No. of Inadequate Responses	No. Reporting No Expense	*Reporting Expenses*		No. of Inadequate Responses	No. Unwilling to Expand	*Willing To Expand*		
				No.	Average Amount			No. Not Submitting Usable Estimates	Submitting Usable Estimates	
									No.	Average Amount
A. Grants to foreign visitors	433	29	191	213	$16,466	146	13	102	172	$32,294
B. Nonfaculty grants to Americans	433	31	366	36	7,519	229	30	83	91	15,263
C. Faculty and staff expenses	433	34	272	127	12,846	203	15	81	134	15,748
D. Equipment and materials	433	33	346	54	1,920	262	15	78	77	7,543
E. Other expenses	433	35	340	58	5,182	256	15	71	91	8,485

* Exclusive of reimbursements from the Government or other sources.
† Sources of funds are as yet undetermined.

of capital investments, is attributable to foreign visitors. The comparative expenditures for other purposes are given in Table 5.

Currently, the size of nonreimbursable programs decreases as institutional size decreases, as has already been shown in Table 2.

Potential expansion

It is perhaps significant that 280 out of 433 institutions expressed a willingness to participate in new or expanded programs if funds can be found for reimbursement. Of these, 187 submitted estimates which could be tabulated. Details are given in Table 3; such expansion would require considerable additional capital investments, as shown in Table 4. The field of largest potential expansion in annual programs is grants to foreign visitors, with faculty and staff expenses rating second place, as shown in Table 5.

Comparative data on willingness to expand is shown below. It is interesting to note the high degree of interest in expansion that the small institutions indicated.

Category of Institution	*Total Response to Questionnaire*	*Indicated Willingness To Expand**	
		No.	*Percent*
Special	23	6	26.0
Small	280	194	69.3
Medium	93	58	62.4
Large	24	17	70.8
Very large	13	7	53.8

* Figures include all institutions which expressed a willingness to expand programs, regardless of whether or not they submitted estimates.

TABLE 6: PRINCIPAL OBSTACLES TO EXPANSION OF INTERNATIONAL EDUCATIONAL PROGRAMS BY INSTITUTIONS, CLASSIFIED BY ENROLLMENT

OBSTACLES*	NO. OF INSTITUTIONS REPORTING					
	VL	L	M	Sm.	Sp.	Total
Lack of continued financial support	6	18	50	164	8	246
Limited staff resources (includes problem of availability of additional qualified personnel)	4	7	19	44	.....	74
Limited facilities	1	12	15	40	6	74
Rising enrollments; necessity to provide for American students first	3	1	10	10	.....	24
Necessity for expending all resources on current programs	1	2	11	16	1	31
Restrictions imposed by charter of authority or by state legislative body	.....	.....	3	9	3	15
Lack of opportunity (Government neglects smaller institutions or Negro institutions)	.....	.....	4	8	.....	12
Lack of enthusiasm (student and faculty attitude, etc.)	.....	1	1	7	.....	9

* Other obstacles, reported infrequently, included inadequate Government policies and procedures, problems of cultural orientation (language barriers, etc.), and lack of sabbatical leave programs.

Only 13 out of 433 institutions expressed an unwillingness to participate in expansion in any field.

Obstacles to expansion

The principal obstacles to expansion as listed by the responding institutions are shown in Table 6.

APPENDIX A

Excerpts from President Eisenhower's Commencement Address at Baylor University, May 25, 1956

Many nations, though their cultures are ancient and rich in human values, do not possess the resources to spread . . . needed education throughout their populations. But they can wisely use help that respects their traditions and ways. For example, the whole free world would be stronger if there existed adequate institutions of modern techniques and sciences in areas of the world where the hunger for knowledge and the ability to use knowledge are unsatisfied because educational facilities are often not equal to the need.

Do we not find here a worthy challenge to America's universities and to their graduates? I firmly believe that if some or all of our great universities, strongly supported by private foundations that exist in number throughout this land, sparked by the zeal and fire of educated Americans, would devote themselves to this task, the prospects for a peaceful and prosperous world would be mightily enhanced. I honestly believe that the opportunity here for each educated American is invaluable beyond the comprehension, almost, of any one of us.

In no respect should the purpose of these institutions be to transplant into new areas the attitudes, the forms, the procedures of America. The staffing, the conduct, the curriculum of each school would be the responsibility of the people where the school might be built. Each school would help each nation develop its human and natural resources, and also provide a great two-way avenue of communication.

Such a voluntary effort in people-to-people partnership would be a dynamic, a fruitful corollary to . . . elements already effectively at work in our governmental foreign policy. . . .

APPENDIX B

Statement of President of Harvard University, and Reply from President of the American Council on Education

HARVARD UNIVERSITY
Cambridge 38, Massachusetts
January 29, 1957

OFFICE OF THE PRESIDENT

DEAR MR. ADAMS:

Your circular letter of January 10, together with relevant excerpts from President Eisenhower's Commencement address last May at Baylor University and a most exhaustive questionnaire dealing with the whole field of international education, has reached my desk just a week in advance of a Middle Western trip in which I must make a number of appearances before alumni audiences. I want to do full justice to the very important topic on which you and the American Council on Education are conducting this canvass, and yet I shall be unable at this time to follow through to its completion your questionnaire.

Under the circumstances I hope that you will let me give you in letter form a brief outline of Harvard's recent experience in the field of international education with specific reference to the first two questions, I and II, of the questionnaire. I shall then leave to various administrative associates the job of picking up the very considerable amount of detail involved in providing you with a summary of our multifarious activities in the foreign field and detailed estimates as to our total expenditures for international programs. This last item we should not be able to answer at all if it were not for the I.B.M. machines in our Comptroller's office, and I have the suspicion that the figures, when they eventually come from those machines, will prove as useful—and perhaps as startling—to me as to you.

The truth of the matter is, I fear, that Harvard, like many other large educational institutions in this country, has edged deeper and deeper into the field of international education during recent years without ever reaching a specific point at which it seemed logical and necessary to stop for a factual survey and a reappraisal of our position. In other words, the problem we are dealing with "just growed" at Harvard, and presumably at many other American universities and colleges.

What I have to say in the remainder of this letter deals necessarily with Harvard. I do not attempt to speak for other American institutions. Indeed, many opinions I express must be my own and will not necessarily represent the opinions of other administrative officials here in Cambridge. In dealing with foreign students and foreign scholars and research projects in foreign countries—as in all other matters—Harvard's scheme of organization is essentially pluralistic, and no one man, even the President of this place, can maintain more than general oversight of so large a field of activity.

To turn specifically to questions I and II on your questionnaire:

Of the six objectives you suggest as justifying a broad program of international education, I find myself most in sympathy with number 3, "strengthening of educational, scientific, and cultural resources of mankind." The phraseology is pretty general, and, while I want to be on the side of the angels, I feel that we should define our aims a little more specifically than this.

Actually, five of your six reasons for encouraging international education seem to me good reasons. But do they not pass by entirely the main function of all education—international or otherwise? Should not the primary function of an educational institution be to determine the intellectual potential of available candidates for study and then to educate individuals to their full capacities?

Does it matter that Aristotle was a Greek, Averroes a Spanish Arab, Comenius a Czech, Galileo an Italian, or Leeuwenhoek a Netherlander? They all "advanced learning" and "helped perpetuate it to posterity" (thus citing a couple of phrases out of Harvard's own traditions). By these tokens they would have all been welcomed as graduate students or research fellows, and they might even have qualified for scholarship aid. As alumni of any American university, such men would doubtless have encouraged understanding among nations, developed the economic and social structures of their respective countries, added to the world's cultural resources, etc., etc. I think we educators can all agree on the advantages of a free trade in ideas and a free exchange of scholars in a world now unhappily divided.

Point number 4 as worded in your questionnaire I find disquieting. Have we any reason to suppose that intelligent foreign visitors will acquaint themselves solely with the "strength and progress" of the United States? Will they not also discover in us an occasional social weakness or economic lag? It would to my mind be unrealistic to equate national propaganda with international education. I note with enthusiasm that President Eisenhower's address at Baylor explicitly disavowed any intention of transplanting our American attitudes and procedures to other lands.

If you can continue to bear with me, I will now turn to question II, inquiring as to the most effective roles of Government and of American higher education respectively in the conduct of international educational programs which are financed in whole or in part by the Government.

Here I should say at once that our thinking on this question is shaped by the nature of the expansion into foreign activities which has taken place at Harvard in the last twenty-five years or so and particularly since the end of World War II. At the present moment the Harvard community includes about eight hundred foreign students and over four hundred alien research fellows or visiting scholars attached to our faculties. These represent about 8 per cent of our total academic personnel—a percentage which we expect to maintain as a matter of studied policy even under the American population pressures of the next few years.

We find the presence of all these foreigners stimulating, and we believe we are serving directly their personal educational needs as well as, through them, encouraging indirectly American relations with their own countries.

The great majority of these 1,200 came to us as individual candidates for degrees or for faculty posts. Whether or not their visits were Government

sponsored or they are recipients of Government subsidies, their admission or their teaching qualifications were determined by this university and not by governmental agencies.

Even in regard to the special non-degree programs which we have set up at the request of various agencies of our Federal Government, we believe that it should be the respective roles of Government to govern and of educators to educate. International educational programs, like Government research projects, are tolerable in a free university, we believe, to the extent that they contribute towards the advancement of education.

Harvard has systematically resisted pressure to engage in secret scientific research or to undertake industrial "developmental" work in university laboratories and institutes. In the same way we have more than once declined to provide here at governmental request international educational services which we felt were incompatible with the work of a university. It would be our hope that privately endowed universities in America might cooperate in upholding similar standards.

Obviously I speak here for the privately endowed university—not for public schools and colleges, vocational schools, or training institutes operated by industrial firms. The relationship of such organizations to the government may involve very different factors.

Several years ago we experienced some difficulty in securing adequate evaluations of the qualifications presented by students from some foreign countries. More recently we have found the Institute of International Education most helpful in providing evaluation data. The standards set by such private endowments as the Rockfeller Foundation and the Commonwealth Fund have been uniformly high, and our dealings with the Committee for the International Exchange of Persons have been thoroughly satisfactory to us.

Since I am convinced that the basis of American society is and should remain essentially pluralistic and flexible rather than monolithic, I would hope that no single agency, representing either Government or educational interests, would attempt to regulate too closely the international movement of scholars.

So much for the exchange of opinion on general policy matters called for by your questionnaire. The rest of the data you need seems primarily a matter of factual accumulation, and I am enclosing with this letter the comments and figures provided by various staff members in administrative posts attached to our nine separate faculties and operating through our general University "overhead."

It may be that as you and your staff associates come to analyze the answers received as a result of your survey, you will wish to come back with more specific questions about some of our Harvard activities in the foreign field. If so, please do not hesitate to write again. I am sure that a candid appraisal of the whole foreign situation is important, and we at Harvard want to do everything we can to help.

Sincerely yours,

NATHAN M. PUSEY

President Arthur S. Adams
American Council on Education
1785 Massachusetts Avenue, N.W.
Washington 6, D. C.

AMERICAN COUNCIL ON EDUCATION
1785 Massachusetts Ave., N.W.
Washington 6, D.C.

February 8, 1957

DEAR MR. PUSEY:

If the Council survey on the activities and prospective plans of colleges and universities in the field of international education has no other result than your letter of January 29, we shall indeed be well rewarded for the efforts we have made. In my judgment, your letter gives the clearest and most cogent analysis of the entire topic which I have yet seen. I have often observed that I was troubled by the fact that the international educational activities were often more characterized by zeal and good will than by clear definition of objectives and realistic planning. Your stress upon the main function of all education as being also, and necessarily, the main function of international education strikes me as being a salutary emphasis of first principles. I hope you will let us here at the Council quote you in conversation, correspondence and in the various publications of the Council.

I am likewise enthusiastic about your thought concerning Question II in the questionnaire, which you will recall inquires into the most effective roles of the Government and of American higher education, respectively, in the conduct of international educational programs which are financed in whole or in part by the Government. In our work here, we are constantly bedeviled by this particular issue and this is precisely the reason the question finds a place in the questionnaire. You are, of course, entirely correct in your observation that national propaganda should not be equated with international education. I believe it to be vitally important that the distinction between the two be kept sharp and clear for in my work I am continuously troubled by the ease with which proponents for a given enterprise move from using one basis to the other and back again to make the case for the activity they wish to support. Perhaps the reason for this is that the American public generally has not yet come to a clear realization of this distinction in their thoughts about the foreign policy of our country. We seem to claim to have a disinterested view with respect to the establishment of a high moral tone in international relations; yet this position seems to be capable of being quickly modified whenever a special interest group comes to the conclusion that it is being hurt by such a policy. Perhaps the identification of this ambivalence is a responsibility of education, too. As you suggest, the issue here is not unlike that in Government-supported research activities, on which the Council's Committee on Institutional Research Policy expressed itself two years ago.

Finally, you encourage me a great deal by your thought that the survey in which we are engaged may disclose results which will give the chief executives of colleges and universities a better basis on which to make a reappraisal of the institution's position in this field. If this result does come out of our activity, I believe we may have made a useful contribution. As it stands, I think that many institutions will discover that they have a considerably different involvement in such activities than they realize. Surely, if the entire issue is to be dealt with effectively, the first step must be to ascertain the dimensions of the present activity. You may depend upon it that

we shall take advantage of your offer to write to you again about this matter. Your interest and your willingness to help are deeply appreciated.

Sincerely yours,

ARTHUR S. ADAMS

President Nathan M. Pusey
Harvard University
Cambridge 38, Massachusetts

HARVARD UNIVERSITY
Cambridge 38, Massachusetts
February 13, 1957

DEAR PRESIDENT ADAMS:

I am glad that my comments on your questionnaire about international education seemed to you useful and timely. Of course I shall be glad to have you quote them in conversations or correspondence. If you decide to publish quotations from the letter, I shall leave it to you to see that no remarks are lifted out of context. I would, of course, not wish to be misunderstood or to hurt the feelings of other educational institutions whose situation may be a little different from ours here at Harvard . . . .

I agree with you that all this may be important in its implications and that it might be helpful for a number of American universities to make a candid reappraisal of their situations at this time.

Very sincerely yours,

NATHAN M. PUSEY

President Arthur S. Adams
American Council on Education
1785 Massachusetts Avenue, N.W.
Washington 6, D. C.

APPENDIX C

Supplementary Statistical Analyses

TABLE 7: RESPONSE TO QUESTIONS ON POLICY

CATEGORY OF INSTITUTION	TOTAL RESPONSE TO QUESTIONNAIRE	NO. OF INSTITUTIONS RESPONDING TO INDIVIDUAL QUESTIONS				
		Q. 1	Q. 2	Q. 3	Q. 4	Q. 5
Very large	13	13	13	12	10	11
Large	24	24	23	23	16	18
Medium	93	91	88	65	39	40
Small	280	258	242	143	69	91
Special	23	19	18	10	5	6
Total	433	405	384	253	139	166
Percent	*100*	*93.5*	*88.7*	*58.4*	*32.1*	*38.3*

TABLE 8: ANALYSIS OF RESPONSES OF INSTITUTIONS TO QUESTION 1, CLASSIFIED BY ENROLLMENT AND REACTION TO SIX EXAMPLES OF PURPOSE

PURPOSE OF ACTIVITY AND REACTION	NO. OF INSTITUTIONS RESPONDING, CLASSIFIED BY ENROLLMENT					
	VL	L	M	Sm.	Sp.	Total
Total no. of institutions responding to Question 1	*13*	*24*	*91*	*258*	*19*	*405*
1. Encouraging common understanding among nations						
Selected	7	15	60	212	15	309
Rejected						
Considered purpose to be secondary	2	2	7	9	1	21
2. Developing the economic or social structure of the foreign country participating						
Selected	5	10	34	67	7	123
Rejected	1		4	5		10
Considered purpose to be secondary	1	4	11	21	4	41
3. Strengthening of educational, scientific, and cultural resources of mankind						
Selected	6	16	58	150	12	242
Rejected			1			1
Considered purpose to be secondary	1	1	4	11	2	19
4. Acquainting the people of other nations with the strength and progress of the United States						
Selected	4	7	20	56	2	89
Rejected		2	9	9	1	21
Considered purpose to be secondary	2	4	14	27	6	55
5. Enabling people of the United States to learn about, and benefit from, their association with the peoples of other nations						
Selected	5	8	38	131	9	191
Rejected			2			2
Considered purpose to be secondary	1	4	10	27	2	44
6. Combating communism						
Selected	2	4	21	57	4	88
Rejected	2	1	8	6		17
Considered purpose to be secondary	2	6	14	31	6	59

TABLE 9: ANALYSIS OF RESPONSE OF INSTITUTIONS TO QUESTION 2, CLASSIFIED BY ENROLLMENT AND REACTION TO ROLES OF GOVERNMENT AND HIGHER EDUCATION IN CONDUCTING PROGRAMS

RESPONDED THAT RESPONSIBILITY SHOULD LIE WITH	NO. OF INSTITUTIONS RESPONDING, CLASSIFIED BY ENROLLMENT					
	Very Large	Large	Medium	Small	Spec.	Total
A. Nongovernmental institutions and organizations	5	5	14	43	3	70
B. Governmental and nongovernmental agencies equally	6	14	58	156	13	247
C. Government	2	4	15	37	2	60
Total	13	23	87*	236*	18	377*

* An additional 7 replies did not appear to be related to the question (1 medium, 6 small).

APPENDIX D

Data on Development of Questionnaire on Which This Report Is Based

The chronology and process of the questionnaire's development were as follows:

a) First draft prepared by the staffs of the Commission on Education and International Affairs and Committee on Institutional Projects Abroad in the summer of 1956 on the basis of suggestions made by the members of the Special Joint Committee (see page 385 for membership of this committee).

b) September 10-11, 1956: First draft presented to Special Joint Committee for review and revision. The committee appointed an *ad hoc* drafting subcommittee to work with the staff to revise the document according to the Special Joint Committee's suggestions.

c) October 5, 1956: Second draft submitted to a group of 15 selected institutions to test its usefulness and workability.

d) November 9, 1956: Third draft, reflecting suggestions of selected institutions, presented to the Commission on Education and International Affairs for suggestions and comment.

e) November 15, 1956: Fourth draft, incorporating the commission's suggestions, sent to members of Special Joint Committee for revision.

f) December 11, 1956: Fifth draft, sent to members of Special Joint Committee for review and approval.

g) January 10, 1957: Final copy sent to heads of member institutions.

THE INDEX TO THIS VOLUME HAS BEEN REMOVED FROM THIS POSITION AND PLACED AT THE BEGINNING OF THE FILM FOR THE CONVENIENCE OF READERS

TABLE 9: ANALYSIS OF RESPONSE OF INSTITUTIONS TO QUESTION 2, CLASSIFIED BY ENROLLMENT AND REACTION TO ROLES OF GOVERNMENT AND HIGHER EDUCATION IN CONDUCTING PROGRAMS

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